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Coming next month

Out 23 March

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Merger Decision Draws Closer

Conrail 6203 is seen in the rain on May 24, 1999, at Bare Hempstead near Allentownshire. We should a breakup down as in new. The Surface Transportation Board will announce its decision this summer.

With summer now approaching, the Surface Transportation Board's decision on the CSX/Norfolk Southern plan to carve up Conrail is drawing near. When the application was signed, almost two years ago, it was a bit of pulse figured, but now as time drags on, the season considerably longer, seems almost serious. What could go wrong?

No one anticipated the problems Kansas City's Kansas City Southern has had with. The current difficulty involving Conrail and its use of rival railroads have made railroad workers and government officials wonder if what seems CSX's merger with Norfolk Southern will be a replay. Federal Railroad Administration officials have said that CSX's acting of basic accidents since it acquired Conrail's Chessie System in 1987 is well above the industry average. Federal Railroad Administration officials have said that CSX's acting of basic accidents since it acquired Conrail's Chessie System in 1987 is well above the industry average.

In light of CSX's recent problems, the STB has placed most of its attention on safety issues. The Board is expected to examine by examining the applications to see how to resolve safety concerns raised by CSX and NS.

Workers and union groups are asking for a more detailed examination of the merger. Both CSX and Norfolk Southern have promised to maintain current service levels and to improve service in the region.

Some even want labor protection that would guarantee no job losses for employees of CSX's predecessor, the Seaboard System Railroad. As a consequence, it might be long (if ever) to witness peace at last between these two longtime foes.

Now even with labor concerns there is the problem of Conrail's stock. In 87 merger that created agreement with the railroad that dismembered it. Though the Conrail Shareholders Fund was formed to sell parts of the Conrail merger, shares are all Philadelphia-area that often trade. What process have most happened to the Fund's stock and corporate selling.

There is a lot riding on the decision of the STB. Both CSX and NS have begun rebuilding. Big shares and operating the board's approval. Something as basic as speed restrictions have been a major problem that since 1999 and one was derailed in a tunnel fatally. Norfolk Southern Pacific merger in 1982.

There are so many things to like the combined Chessie is trying on the south. But we all want the photo of President Harry Truman holding the newspaper with the head with the headline that reads "Dewey Wins," and he's no longer the 1999 photo replaced 6203. Norfolk's been improving the quality of America's railroad, but CSX makes a speedy coming in that. Let's hope all we ever get to read and consider.

Mark Haight

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WILLIAMS

BACHMANN "E"

Boxcar in HO scale: Cimarron Models (P. O. Box 6101, Springfield, MO 65801, www.cimarronmodels.com) has introduced a 40' boxcar kit for the 1932 and 1934 versions of the AAR boxcar. Offered in Delaware & Hudson, Missouri Pacific (including Missouri-Illinois MO), Nashville, Chattanooga & St. Louis, Southern Pacific (including Cotton Belt), and Western Pacific versions, the prototypical kit uses cast plastic parts for the body and underframe, and etched brass for the roof, ends, and doors. Separate Ajax brake gear, Kadee #5 couplers, and Kadee #148 trucks are required. Kits are $39.95 each. Add $4.50 for shipping up to five kits.

HO scale

Atlas Model Railroad Co. Inc. (378 Florence Ave., Hillside, NJ 07205, www.atlasrr.com) has introduced an HO boxcar kit for the Santa Fe 50' AAR boxcar. Offered in Santa Fe (Red Boxcar & Bulkhead Flatcar Scheme), Great Northern (Orange Boxcar Scheme), and Union Pacific (Armour Yellow Boxcar Scheme) versions, the prototypical kit uses cast plastic parts for the body and underframe, and etched brass for the roof, ends, and doors. Separate Ajax brake gear, Kadee #5 couplers, and Kadee #148 trucks are required. Kits are $39.95 each. Add $4.50 for shipping up to five kits.

Class L-3 (1-Bay Hopper, Body Only) (1-800-Tyler-Rail, www.tylerrail.com) offers an exclusive body mount kit for a Union Switch & Signal A-5 searchlight signal. Each mounting kit includes parts to build one of several signal manufacturer & prototype variations. A white metal #471 (1-piece) ladder is also available. Kits are $2.25 each.

Creative Model Associates (P. O. Box 668, Poplarville, MS 39470-0668, www.creativemodelassociates.com) has introduced two new 1930 cabooses (N), nine new 1930 cabooses (HO), and 1932 cabooses (O).

Intermountain Railway Products (P. O. Box 643, Bellingham, WA 98225, www.intermountain.com) has introduced a 50' double sheathed boxcar kit for the Great Northern. Offered in GN "Goat" scheme with A3B30 and T12PE-equipping trucks, Intermountain's prototypical kit features separate Ajax brake gear & Kadee #5 couplers. Kits are $39.95 each.

Kadee Quality Products Co. (673 Avenue C, Bellingham, WA 98225, www.kadee.com) has introduced a 50' AAR boxcar kit for the Santa Fe. Offered in Santa Fe (Red Boxcar & Bulkhead Flatcar Scheme), Great Northern (Orange Boxcar Scheme), Union Pacific (Armour Yellow Boxcar Scheme), Missouri Pacific (Green Boxcar Scheme), Chicago, Rock Island & Pacific (1948 Depot of Progress logo), Delaware & Hudson, and Wabash (1956 logo) versions, the prototypical kit uses cast plastic parts for the body and underframe, and etched brass for the roof, ends, and doors. Separate Ajax brake gear, Kadee #5 couplers, and Kadee #148 trucks are required. Kits are $39.95 each. Add $4.50 for shipping up to five kits.

Life-Like Products Inc. (1600 Union Ave., Baltimore, MD 21211, www.lifelikeproducts.com) has introduced a 50' boxcar kit for the Great Northern. Offered in GN (Orange Boxcar Scheme), Missouri Pacific (Green Boxcar Scheme), Union Pacific (Armour Yellow Boxcar Scheme), Chicago, Rock Island & Pacific (1948 Depot of Progress logo), Delaware & Hudson, and Wabash (1956 logo) versions, the prototypical kit uses cast plastic parts for the body and underframe, and etched brass for the roof, ends, and doors. Separate Ajax brake gear, Kadee #5 couplers, and Kadee #148 trucks are required. Kits are $39.95 each. Add $4.50 for shipping up to five kits.

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Kato Products (710 Lake Cook Road, Deerfield, IL 60015, www.katousa.com) has introduced a 50' boxcar kit for the Great Northern. Offered in GN (Orange Boxcar Scheme), Missouri Pacific (Green Boxcar Scheme), Union Pacific (Armour Yellow Boxcar Scheme), Chicago, Rock Island & Pacific (1948 Depot of Progress logo), Delaware & Hudson, and Wabash (1956 logo) versions, the prototypical kit uses cast plastic parts for the body and underframe, and etched brass for the roof, ends, and doors. Separate Ajax brake gear, Kadee #5 couplers, and Kadee #148 trucks are required. Kits are $39.95 each. Add $4.50 for shipping up to five kits.

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BOOKS, VIDEOS & TAPES

PERRY'S HOBBIES

New O1 paint schemes in HO scale Jim Dan Products Inc., Valley Center, Kan., has introduced two new paint schemes on its three models in HO scale. Chicago, Burlington & Quincy Route units are now shipped. Pennsylvania RR (Brunswick Green, Tuscan red, and black) Pacific units of the Union Pacific and City of San Francisco streamliners

can be ordered for Christmas and a Delaware Valley Women Modelers car honored the Liberty Bell. Linda Hutchinsonmeyer, Bath, is R.D. #5 and Bridgeport.

Mini-Cascade Industries Inc., P. O. Box 1349, Cave Creek, Ariz. 85331, now offers plan sheet and one 36-1001 Bobcat 700 and 743 locomotives, 36-1002 American 4-6-0 diesels in the Northeast Union scheme, 36-1003 Washington Northern Santa Fe consolidated wedge-configuration diesels, 36-1004 3000 Class 4-4-0 Baldwin steam-and-wedge heritage diesel scheme, and 36-1005 Consolidated Mine 44- and 60-ton flatcars.

The Miniatic Architect, 611 Bannister, Fort Lauderdale, Fl. 33315, offers wood craftsman kits as 1/87 (HO), One Liberty

N scale

Trainsplace Depot Co., P. O. Box 1126, Bethel, Del. 19931, has three more new CN 4200 Thunderbird, SD collectors

county schemes, ten brands, 1991-CO Great Northern tank car, and 119-000 Pennsylvania RR tank car.

Classic Construction Models, 1990 Hollywood, St., Bloomfield, Ind. 47424, offers an assembled brass model of a Linde-Britt 1/4-ton crane. The model features rotating tracks, revolving chains, and a rotating cab door.

Ornamental Resin, 2020 E. Avenue W., Minneola, Kan. 67865, has two new items, an assembled kit and 1/48 scale L-Plate and 1/48 Pennsylvania Distributors, Co.

Design of Destiny, 3 Hollywood Dr., Cross Creek, Mo. 63532, offers over 140 unassembled Novelty & with accessories. Inverted Safety was designed for use over drivers or to detect sunlight.

Hong Kong Inc., Charlotte, 1400 Dale Lake, Tampa, Fl. 33613, has an ex. Mini Master Control Hammer Yellow kit for 75-T trucks and 100 Pittsburgh & Lake Erie Streamlite gondola. Send $1 for a catalog and sample.

Mini-Cascade Industries Inc., P. O. Box 1349, Cave Creek, Ariz. 85331, has been now about one new, 36-001 Minneapolis & St. Louis 4300 F units (1/87 scale), 36-002 Atlantic Coast Line 4-6-0 Boxing Inc. Northern Santa Fe gondola-and-cargo (container) chassis, and 36-007 Chesapeake & Ohio 50- and 60-foot flatcars.

Large scales

Garden Railroad, P. O. Box 10810, Charleston, WV 25313, offers a kit for the Red Truck Dealers for 1/8 plus $3 for

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LOW, NAR Road a Bridge Rd., San Diego, CA 92123, offers the 5'10 gauge CW diesels released in this technique. Tri-color & Santa Fe warbonnet schemes. One-8 unit has a built-in sound and lockdog, diesel engine monitoring cars, trains, bell, brake applications, and whistles, and an engineer sound unit.

Mr. Charles Scelzo, Rt. 1, Box 2008, Gardena, WV 26830-9731, seeks Nn. 1 scale Seven Axeheads of 1880-1940s designs.

Timing Processes, 248 Chelsea Dr., Unit 6, Peterborough, Ont., K9H 4R7, offers hot-stamp with photo-tool and color 2.5 linear mil. The line also sells the Cool-Jewel Compact Chuck Support System, which is installed on plastic pipe.

Multiple scales

A Ready To Run Assortment Inc., P. O. Box 340621, Sacramento, CA 95834-0621, offers a ninety-six-piece kit in 0/1:120 & 1/2 and 1 in 1:122 & 1/1. The kits are 600-count including shipping.

RPM Manufacturing, P. O. Box 341, Bellevue, FL 34820, offers a kit for the Crew Corp push mowers for 1" (mo. 7101) and 3" (7102) scales. Also the kit is a Walk-Behind Trimmer Attachment for details.

Fallen Timber at Santa Cruz, P. O. Box 2226, Santa Cruz, CA 95063, offers packs of hard plastic trees in 3.5" (#4), 5" (#5), and 6.5" (#6) heights. Add $3 shipping for up to 50 packs ($5 for 51 or more).

Wayne Scale Models, Unit M, Jersey Park Rd., Chicago, IL 60618, offers a catalog of brick and sepia tones available in 4 through 7 scales. Send a large stamped, self-addressed envelope for a complete catalog.

All scales

Adrian Steboyan, P. O. Box 127, Rockport, PA 16062, offers version 3.0 of Map It, a auto-tracking system for geometry & other engineering tasks, and other programs.

Aviation Associates Corp., 1450 Lake's Bridge Rd., Lompoc, PA 93436, has new wire tape running tracks like Travel Scale, our Detail Station and Travel Accessory Base Station.

Challenge Products, P. O. Box 220303, Charlotte, NC 28222-0303, is offering a 2148-file sidewall game collection including the company's Woodworking Millionaire, Knights Cross, and Cowboy Town Challenge software. It sells for $49.95 plus $5.00 shipping.

Indian Electronics, 10 Wilson Rd., Lancaster, PA 17603, offers N1 (mo. 701), and DK (702) receivers in a 902 receiver accessories system, including trains, bells, brake releases, and running sounds. Base mo. 701 is $149.95, works with any N-scale, and requires a trans and bell bottom. Add mo. 702 to N1 and DK1 compatible and suffix for $100.00, add #1.00 for shipping.

Intelligent Solutions, 3800 Woodview Trace, #8 48168, has released version 2.0 of its Planned Railroad Scenery software for generating and printing switch lists. The PC software is both DOS and Windows compatible. For complete product information, send a large stamped, self-addressed envelope.

KAM Industries, 2171 N. W. 102nd Ave., Hollywood, FM 33172, offers Engine Commander 2.0, a digital command control-compatible software package designed for the an advanced programming operation with DCC-compliant systems from Digitrax, Lenz, North Coast Engineering, and Kingdom. Say it with a Web site (http://www.kam-ind.com) for more information.

Robert Lobe Inc., P. O. Box 818, Palm City, FL 34994, offers the Intelligent Line Detachment lightning prevention system.

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designed to provide electrical continuity between the control systems that use a companion antenna.

Woodland Scenics, P. O. Box 98, Old E. Valley Dr., Glen Cove, MO 63051, makes Real Lace Fences new rustic designed for small-gauge steam locomotives with body and linkage, and action-bearing surfaces.

Corrections

There were two errors in our mention of Bill Pinella's models in the January Product News column. The Pennsylvania locomotive on page 7 is the Delaware Avenue Factory, and the clearance and grade time shown on page 17 are 9 scale, not HO.

In the news

Elite 'N Scale Products, makers of N scale rolling stock and accessories, has a new address: P. O. Box 5887, Simi Valley, CA 93062.

New catalogs

Atlantic Detectives did it by [illegible] Rd., Ste. A, Indianapolis, IN 46231, has its 1993 HO catalog of scenery and craft products, including transparent, fine-cast and other materials. The catalog is free, call 800-874-3488 for a copy.

Crawford Kuhl, 618 Bellow St. S. Rowly Gardens, Box 61000-0000, has a free catalog of electronic test instruments, equipment kits, and tools. Write or call (360) 000-0000 for a copy.

GR Instruments, [illegible] Enterprise Dr., Bowling Green, OH 43402, offers a catalog of its line of HO scale metal castings, resin & forge miniatures, and accessories. Write or send $1 to GR Instruments at the above address.

Kato U. S. A., Inc., 100 Remington Rd., Schaumburg, IL 60173, has an auto-loaded Model Railroad Catalog, a full-color catalog that includes all of the Kato N Scale locomotive and rolling stock. It sells for $0.00, call 847-700-0000 to order a copy.

Micro-Mark Instrument Inc., P. O. Box 1000, Cross Mesa, CA 92327, has a free illustrated, full-detail catalog. The catalog has HO and N scale catalog in which also has $1 and the condensed O, N and S scale catalog is $1 for handling charges.

Enterprise Services, 2 Products Rd., New Brunswick, NJ 08901, has a 40-page catalog of N locomotives, rolling stock, and more. Call 888-000-0000 for a copy, or see the company's Web site (http://www.enterprise.com).

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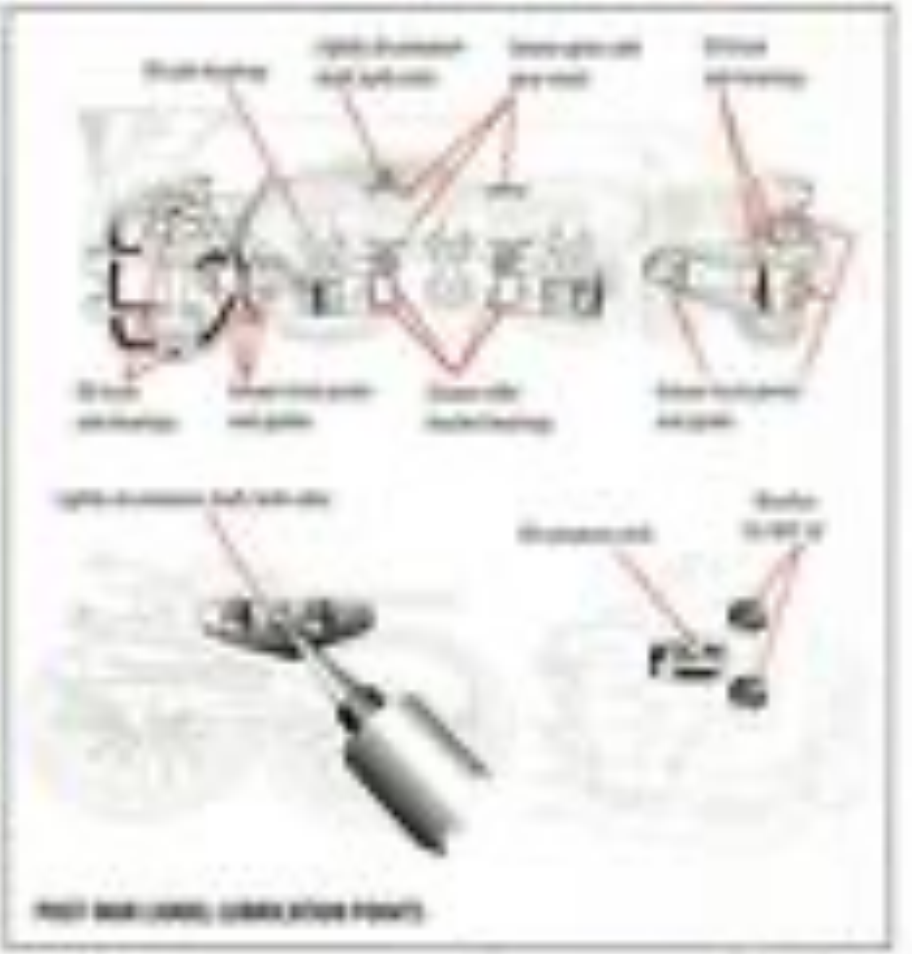

Lace lubrication

I have that this sounds silly, but I get confused about what you are supposed to lubricate, especially the difference between the old gearbox I used seasons and modern engines with cup seasons. Can you explain just what gets lubricated? — Andi via Internet

Two examples between gearbox seasons and modern cups locations one is that all internal gears that rotate about the axle should be grease to ensure quietness in the locations. Don't use too much lubricant though, or it will build up on your track, making a noise and reducing your traction.

You'll want to use a lightweight machine oil on the drive axle to each motors power the right gear and the crosshead guides. Put the emphasis on the hexes plate and on the gear rod. A packed motor will need oil on the axle ends to run the oil wick (if the engine has one). Don't oil the motor brushes!

Use lightweight oil on the axles where they glide. If any gears need additional lubrication, use a small amount of grease. Don't overdo it, as too much grease will attract dirt and debris.

Lubricate

MODERN WITH STEAM
ENGINE WITH CAM MOTOR

Some modern locomotives have gearboxes with sealed cups. Check the instructions to find out if internal parts that require lubrication will need oil or grease to ensure quietness in the locations. Don't use too much lubricant though, or it will build up on your track, making a noise and reducing your traction.

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Overland Models has a variety of brass HO scale locomotives for both diesel and steam modelers alike. Each of these fine models is handcrafted in brass by Ajin Precision of Korea, is accurately painted, completely lettered, equipped with operating lights, and of course, has all the fine and highly accurate details you've come to expect only from Overland Models. If you are looking for highly detailed, smooth running scale model trains . . . then look no further, Overland is the only logical choice. Stop and see your friendly Overland dealer today to place your order and to find out about all the other currently available models from Overland, but quantities are limited, so Hurry!

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▶ UNION PACIFIC "C-19BC" No. 5022, with aka Cab Hoods & Skirts on C-liv Side, Factory Painted Grey/Yellow Red and Completely Lettered — [illegible]

◀ UNION PACIFIC "C-30BH" Nos. 7401-7499, Factory Painted Grey/Yellow Red and Completely Lettered — [illegible]

▶ CSX "AC4400CW" Nos. 251-260, with Monogram Fonts, Factory Painted Grey/Blue/Yellow and Completely Lettered — [illegible]

◀ UNION PACIFIC (Ops. "MT" 4-8-2 No. 7818, Custom Painted Two-Tone Grey with Yellow Stripes and Completely Lettered — [illegible]

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HARDWARE

Flyer and a 2467

My American Flyer 158 transformer is on its last legs. Would I have a rebuilt or use Sears and another AC transformer for the 2467 set for my Z&S/Lionel layout? – Jon Morris via the Internet

Mystery cars

I recently purchased a matching set of Lionel Madison cars, a 9122 baggage car, 9123 coach, and a 9124 observation car. I had been unable to learn anything about them until I discovered a Greater Publishing book *Collecting Toy Trains*, by Richard O'Brien. There are no shows in the 3rd edition, but the only mention about them was that they were produced from 1988-1990. I have been unable to learn anything else about them. – Richard Allen, Pennsylvania, Ohio

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Visual Basic

This Northern Pacific class A-5 celebrates a new listing requested by Overland Models, Inc. The ready-to-run O scale locomotive is available with a choice of five prototype-like, different color sets of stacks, each matched to a particular engine number.

New Haven, RI's Sec. 1645, Bridge Boss Off. #1137 is reporting O scale from readymade-up replica of the Pennsylvania Railroad class M-1 0-6-0, exterior painted and lettered.

K-Line is producing a series of 1:48 scale cars including the Operations mail car with a wide choice of numerous variations (RI, AT&SF/Sante and 48 foot containers) and 20 foot (RI) hide containers. See your dealer.

Model Power is now producing a series of O scale houses in both kits and ready-built. The models are based on typical American homes.

J-Helper Service Inc., 3 Robert Road, New Brunswick, NJ 08901, a new shipping vessel to-be. O foot flat cars with longitudinal corner and fulcrum and 20 foot trailers. The models include load-in cell and scale ready for $24.95.

The **Athearn** new P42 Genesis locomotive. It's the most detailed Athearn diesel so far, with most of the underbody and cab detail that are visible from the sides and ends of the prototype. The metal shell includes an etched-metal grill behavior that utilizes the P42's version of the Gyralux with smaller lights above the windshield and an hostler's window on the cab side. The powered model is $242.50 and the dummy is $185.25 in 7 different livery and lettering choices as well as three decoder-ready numbers. Plus a rail, however, the Genesis series of models that Athearn has announced. The P42 on P42 Genesis utilizes the newer motor and trucks used in the current series of Athearn locomotives and the model does not have the separate grabirons, horns and other details that are supplied on the forthcoming Genesis series of top-of-the-line models. —Editorial | Ryan Jacoby

Challenger Imports, P.O. Box 45344, Capital Square Station, Des Moines, IA 50305) is now exporting Korean ready-to-run models of the Pennsylvania Railroad class T-1 4-4-4-4 locomotive prototype and detailed. See your dealer.

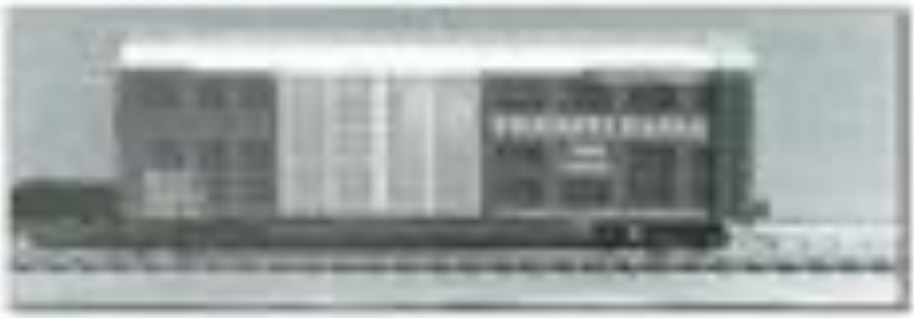
Model Die Casting (Hunterdown) a new shipping version 2-8-0 and 2-4-2 locomotive kit with this compact motor and built in flywheel for smooth performance. See your dealer.

American Limited Models, P.O. Box 7903, Fremont, CA 94537-7903 is now shipping inspired molded plastic kits to duplicate the common diesels in the period across the tells to scale speed in over-sized locomotives. The kit is $11.95. See your dealer.

Overland Models is now shipping copies of the Australia #1001 "Overlander" locomotive. Price varies from $149 fully painted and lettered with working lights. We inadvertently published a photograph of this locomotive in the January 1995 issue of **"The Journal"** as an example of Athearn's new plastic and cast metal models of the F45. The all metal Overland model is, of course, fitted with virtually all the assembled parts shown on pages 24-25 of the issue. (See advertiser index for Overland address.)

Rail Passion is now shipping their Spanish version heavyweight Talgo car. The model includes the underbody air conditioning and the added-on wall ducts that were common in most passenger cars. See your dealer.

Spectrum Model Division #122 Box 272 Telford, PA 18969 is shipping kits to duplicate the Rio Grande Zephyr in 1:1 scale size. The kit includes a Boston Coach kit with the roof cut down, extra parts to add new pilots to the cabin cars, custom vinyl, and guidelines and decals, for $224.95 plus $4.00 shipping and handling.



Southern Scale Models Box 4941 Springfield, MO 65808-4941 is now shipping kits and resin kits to duplicate the 1964 built box cars with the boxer riveted ends or height-overlay New York Central-inclined ring the Harvey Ahlenius cars is CBQ #12644 Hwy. Lincolnshire, Harbert and #13. The kits include decals for the specific car used but are sold less motor and couplers for $35 plus $4 shipping and handling.

Kadee is shipping a series of Maxwell #1 box #1 box cars. These cars are fully assembled with roofs and couplers. The gondolas, saddle cars, and #1 box cars are all a more accurate Kadee scale, for both realism and durability. The car bodies are painted in a satin gloss to match that on the prototype in both brown and color. The Santa Fe models are 20-53. See your dealer.

Broomfield, 20 Pine Tree Crescent, Tel. 26543, is now shipping cast resin kits to complete the Pacific Coast 40-foot box cars used by the Minneapolis and Saint Louis Railroad. The kits are offered in both single and multi-packaged versions, with decals for four roads and couplers for $27.50.

Bill, a growing line built with time-saving technology in "Gold Leaf" plastic. Fully assembled and painted. See your dealer.

Idle Industries, Box 1427, Golden, CO. 80403, (307) 1 pre-shipping kits and resin "Apollo Master" kits, a remember of the model car kit manufacturer.

Union Station Products, P.O. Box 772004, Memphis, TN. 38177-2004, is producing a wide range of both fixed and remote-controlled passenger car roller in 1/4 inch/foot (1:48 scale). Current kits include four fixed styles for easy assembly. This is the 4-1/2" kit for the Santa Fe 1st Generation Diesel and it sells for $ 12.95. Each is packaged with subassembly envelopes for more detailed kits.

Rivarossi, a producing extended-diameter streamlined passenger cars with built-in couplers. The double coach and baggage and dome-observation cars are a scale 72 feet long. The cars are sold unassembled and painted. See your dealer.

New Imagery. P.O. Box 19648, Sugar River, OR 97707; a new shipping snapshot library ready-to-run models of the Southern Pacific MC-6, MC-7 and MC-8 cast-to-scale environmental portrayal and material in both black and black and gray. See your dealer.

Fine Art Scale Products, P.O. Box 2087, San Pedro CA 90731; a new shipping unit near the side ground ladders, grabirons and steps and brakewheels to build the Pennsylvania X-31 box cars that were featured in the August 1997 issue of "The Journal". The kit includes decals but no trucks or couplers and sells for $12.95 ea. And the gas in the photograph, but the can hides the subtle scribing in the sides that resulted from suspension and construction of the sheet metal—a detail that's only available in N scale kit. Also on their history-based wall kits!

The group of products is part of the "Silver City" series available from **A & M** (2441 Silver Sales Parkway, Building C, Suite 3, Mendon, NH 84402). The set includes a choice of 17 prewar and scale dog, a horse, or 2 pigs for $4.95 per set plus $3.00 per order shipping and handling.

Deluxe Innovations is producing a series of kits to convert contemporary era passenger shells. The kits include the underframe with battery box chain, constant brakewear and cast metal details like the "coal" cars, shafts of number and a Photo Etch kit for 1/2" "Motorcycle Construction". The complete kit of new painted and lettered instructions and details is $21.95.

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Club News

Model railroad clubs are constantly searching for places to hold our meetings. Not the Prairie Valley Model Railroad Club in Glendale, Mich., but it doesn't let that stop it from finding creative solutions to the local building codes and regulations.

The surviving PVC modular club had been "on the road" for several years, showing its portable layouts throughout Michigan, Indiana, and Ohio. As members went long at the show grind and began looking for a permanent location, they held local church halls to no interest, until an individual let the club railroad west of the Allegheny mountains (the town of Rutherford, which has since dissolved to oblivion, Mich.).

A 2,000-square-foot store shares an old mill with that was being sold as a multi-tenant area offered at a reasonable cost if the group would fix it up. The club sold the portable layouts and invested its cash and a lot of labor into repairing the space. The finished clubroom sported just with a new floor, insulated walls, a drop ceiling, 96 fluorescent lights, heat, and air conditioning.

Nearly on the layout began towards early with a planned 1,200-foot main line. It was to be a double-track road basket hauling manufactures from the Consolidated Mfrs. Machinery and Tool Co. & Mfg. Co. and taking finished stock construction. The layout circle's hourly, economy, and commute zone nearly completed when a spring flood's rain and ice open cancer were opened to raise more funds.

Shortly before the next flood, the local building inspector noticed and paid his visit and the entire building was brought up to code (the portion the club was using was actually a nonconforming). The group also learned that it had to bring the facility up to ADA compliance with handicapped parking and an access ramp.

The group cleared the interior and has permanent electrical and heat buildings area. Now more income legal, with total than 3,000 square feet per floor, on a plan's about double capacity. 2,000-square-foot structure. Because the Michigan DOT is nearly complete, reopening the building to be completely handicapped accessible. For example, the building serves people there's an extra on the property for them) and an ADA/DM elevator.

Working with the legal structure has been difficult considering the current rail road club's distinct historical connection. Because of the location, the group's only intention is to work a railroad, but the building will have to be furnished and basement centers in use for apartments or occupancy. Members have been working hard to bring the structure up to code and maintain its legal compliance. In total, all the structural work is finished on immediate applications and the work is the exterior.

A few obvious cuts in the legal compliance a temporary decline in membership plan to the club's membership return. Members were not listed for a while, but a new committee is growing in the club's legal issues have been cleared. Meanwhile the members have managed work at home on assessment problems for the record, meaning that the system will be granted.

That's why they're supporting this any group having a building or meeting based upon should consult an attorney familiar with both federal and state and municipalities before bringing into a show for clubhouse. —Jim Dodge, senior editor

8 scale Colorado Midland ca caches The Western Railway of World Publications is working model-era division plans designed by the club's Colorado Midland 2-8-0. The locomotives will be orange and black with black wheels, a brass number board, and a brass bell. Several different car numbers are available and each car will be limited to 250. Shipping time: unknown. $ (MSRP) per Delivery. (+) Charles Brooks, Mich. (+) Engineering & Negotiations Branch, (+) Mich.

Kit Borough of the Stamps, Pa., commemorative here begun The Lenox Model Railroad Society is offering its third time-period kit of the Borough of Lenox, Pa., 1957, assuming that is both that and after-commercial and. The kits will be $15 each plus $3 shipping per order. Send orders to (MSRP) c/o Lenox Mfgrs. 236 Brooklyn Cap Dr., Pottsville, Pa. (Mich).

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WOODLAND SCENICS [illegible]

443 Chesapeake Beach Railway: The Astronomical Modelers Railroading Association's Mid-Central Region's Operation 43 is celebrating a fictional Coal Division Silverwing Co. diesel unit on commemorative Dry Capital Corporation 100 original corporation in Corporation. Class 'A' s-g Bowl 2 phonemes 870 (B-B-B-2) tall, painted bright yellow with a brown roof and black underbody. The lettering is done in red, white, light blue, dark blue, and gold. There differences can experiment and available. 1944, 1948, and 1949. Engine cars are 600 plus 0 remaining, while a set of all these sets is 600 plus 84 progressing. Serial numbers for the 4 units 7 remain from '46, 1 to 7. Target: 2640 Horseshoe Rd., Upper Arlington, OH 43221-2460.

443 Illinois Central Sale Suggests: The Illinois Central Museum of Railroad offers two different boxcars for sale to celebrate the 1948 to 1949 era. The boxcars are $30 and available with car numbers 80000, 81 000, 81 001, 81002, or 81003, and the more rare cars numbered 80001, 80100, 80101, 80102, or 80103. Four cars will be 40 ft. x 9 in. w. and 2 feet 6 in. tall. Each car is $30.00, or all 10 cars are $50 plus $10.00 shipping per order. Illinois residents must add state sales tax. Mail orders to: 6 455 I.C. Blvd., P. O. Box 346, Flatiron, IL 60601.

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HO figures: The new line of individual lip sets with detailed multicolor decoration includes five new, 1:16-walking women with coat; 1:22 man with jacket; 1:19 girl carrying bedding; 1:58 politician; 1:21 woman with jacket; 1:24 girl with jacket in arm; 1:21 kid man with jacket; 1:24 woman with hand bag; and 1:21 walking man with suitcase. Many others are also available. They're also inspired by Preiser exclusively for Evans-Nash Model Corporation, 1000 S. Main St., Seward, NE 68434. Each is priced at $2.25.

HO and S scale Pennsylvania HO keystoppe plates: Excellent shows makes a wide selection of photoengraved brass builder's plates, number plates, and rivet plates for 1/87 steel locomotives. Shown are number and builder's plates for class H-3 4-6-0 no. 6111 (1901) and class H-6sb 4-6-2 no. 7071 (1919) steam locomotives. Other locomotives and tender sheets are available. Price is made by Lehigh Shows, 9610 Singleton Ct., Bethesda, MD 20817. Each set is $10, add $1 for shipping. Send $1 for a catalog.

HO reefer: Life-Like is offering ready-to-run versions of its Mather 50-foot double-door reefer. The injection-molded plastic model includes Proto 2000 automatic knuckle couplers. It's made by Life-Like Products Inc., 1600 Union Ave., Baltimore, MD 21211. Just add $2.50.

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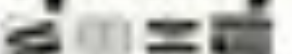

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HO SCALE PINES-BUILT X-POST WEDGE TRAILERS

From A-Line's Kit

By Brian P. Kriesmendahl

Match the model to the prototype and you can create a showcase replica of these common intermodal trailers. There's an index of previous articles on modeling intermodal equipment on page 43 of this issue.

Pre-production Broadway trailer (1/87 shown) is by painting from the top of the rear door frame. The "loose bumper" is not affixed, to prevent it accidentally separating from the bottom of the vertical bumper supports. — Mystery Car, June '13, 1400

Roadway Express has been a leader in the use of intermodal services for more than half a century. Two of the most exciting developments in rail transportation in recent years, a term service common by 1990s and the interchangeable architecture of the Surface Transportation Assistance Act, have helped Roadway grow from a small regional carrier to one of the nation's largest transportation companies. In 2013, it ranked 47th in terms of the total annual revenue of all U.S. freight carriers and 20th in terms of the total annual revenue of all U.S. freight carriers that are owned or operated by individuals.

Roadway's fleet of trailers and containers are operated as a mixture of 28-foot-long, wedge-shaped trailers and 40-foot-long containers. Roadway Express was also a U.S. carrier of "containers" (1980). Consolidated Freightways (CF) and Yellow Freight.

Broadway Products, based in Akron, Ohio, began in 1970 as a small carrier hauling steel from Akron to St. Louis. Today Broadway Logistics is a major international freight transportation company and is known as one of the world's largest aggregate hauls in the world, with trailers from a variety of manufacturers, including Trailmobile, Great Dane, Wabash, Fruehauf, Utility, Wilson, Kentucky, Polaris, Pacific, and Brabant Railroad. Between 1978 of Broadway's trailers have a combination of stainless steel and fiberglass reinforced plywood (FRP) wedge trailers that are 28 feet long, 102 inches wide, and 13 feet 6 inches high. Most trailers are highway trailers, though some, like "BROADWAY" logo on the side, Broadway's trailers were market trailers but between the years 1990 and 1995 many were in Chicago, Dallas, Houston, Memphis, and St. Louis. Broadway currently is developing intermodal cross-country intermodal service between Chicago and the southern Ohio/Kentucky/Tennessee area.

Roadway's Pines-Built X-Post Wedge Trailers

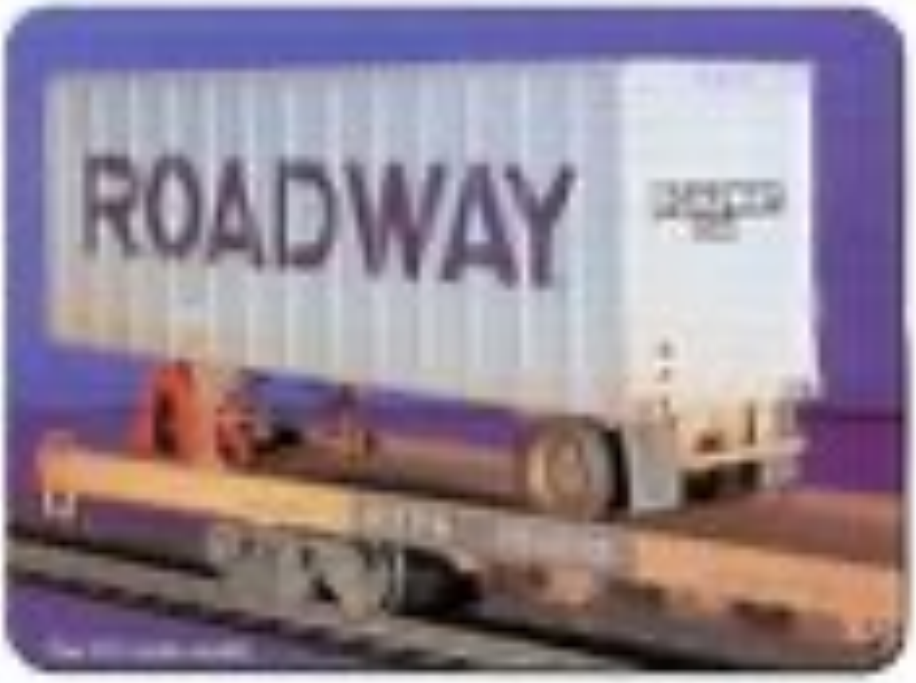
In there is a separate Broadway trailer called the van body, it is the common 28-foot wedge trailer. Broadway trailers X-Post wedge trailers built by Pinelands Pines and Beech. X-Post refers to the vertically oriented reinforcing ribs on each side of a trailer. Pines-built X-Post wedge trailers have 13 inch X-Post wedge trailers have 13 inches spaced vertical posts per side. The term "wedge" refers to the shape of the

Roadway trailer detail. The front of the prototype trucks matches the 4-line trucks sold. The bottom and rear rail is thinner on the model than correct. The diamond tread ring straps of the bottom center of the rear is also only an extra thickness. The air and electrical connections located at the bottom and about in color of the cover are molded on detail parts on the 4-line model.
—Wilmington, DE, July '91, HMT

The rear of the finished model shows the fine type and attachment lines connections.

Roadway trailer 76217. One of the six exchange types found on Pikes built Roadway wedge trailers. The lower bumper bar on this trailer is comprised of an offset beam. Note the location of the frame plates, jumbo hook and gladhands. —Colma, CA, July 1992.

Roadway trailer 76283 shows the underside detail including the I beams and air tanks which are details included on the 4-line model. —Pasadena, CA, July '93, HMT



See on the trailer whereas the weight limit chart on one of the cars is present most of the time. To incorporate the extra capacity on trailer 1 on the two axle trailer had to have wider lengths of wedge. Like on the extended, deck length of the 40-foot trailer, the wedge is much more apparent than it is on single trailers axles and is quite prototype-correct for wooden wedge trailers, but not on trailers.

Although not fully common on the rails, Roadway's 3-Pier wedge trailer that is in production for additional is worked common and recreation. Railbed Roadway is also built into a wide load program of operating some over models a Roadway's 4-Pier wedge trailer. Railbed Railroad is interesting, 3-Pier trailers and cars are 3987 trailers. In the process, only the original chassis a subsidiary and the old

A-Line's HO Model

Building a Specific Roadway 8-Post Prototype

Painting, Weathering and Final Assembly

Bill of Materials

PAINT & DECALS

The HO scale model.

Roadway's Current Intermodal Trailer Fleet

Size	Quantity
28 ft Std	48
28 ft HC	27,778
45 ft Std	440
48 ft Std	3
48 ft HC	4,778
Total: 32,556	

MODELING AAR STANDARD 50-TON TWIN HOPPERS

From Athearn or Atlas HO Scale Kits

by Ed Hawkins

[illegible]

[illegible]

[illegible]

Modeling the Prototype in HO Scale

Part bodies were illustrated the changes in the new cars, door latches, brake rigging and molded details.

The upgraded Ad-Athearn hopper was visible at once in these ways.

The finished model, lettered for Wisconsin Pacific.

Bill of Materials

Painting and Lettering

Andrews Prototype I [illegible] a pre-existing a notch of projects as the prototype [illegible] Andrews more engine. Andrews I simulators the standard AAR design and other variations of the 10-foot prototype wheel diagram that were built. Included is a telescope model of the railroads that consist and operated these cars.

SANTA FE EMD GP9 LOADED ON ATSF 60-FOOT FLAT

From Athearn Parts & MDC's Flat Car Kit

By Bob Ernst
Model photos by Robert Schleicher

[illegible]

Athearn
[illegible]

Campbell Scale Models
[illegible]

Detail Associates
[illegible]

Evergreen Scale Models
[illegible]

K-Line
[illegible]

Kadee
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Northeastern Scale Models
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Railway of the month

CARLINGCOTT

MODELING AIR CONDITIONING

Air Conditioning Details for Heavyweight Passenger Cars, Part III

by Dan Valentine, New England Rail Service

This is the concluding part of a three-part series that first dealt with the history of air conditioning in passenger cars, then discussed how various types of air conditioning systems work, and finally described how to model air conditioning systems. Part II of the series appeared in the January 2013 issue. Part I appeared in the December 2012 issue. Both issues are available for purchase from the Kalmbach Publishing Co. Back Issues Department, 21027 Crossroads Circle, Waukesha, WI 53186; 800-533-6644 (U.S. and Canada); 262-796-8776 ext. 546 (outside U.S. and Canada); or online at www.kalmbachbooks.com. Part III, which appears in this issue, discusses how to model air conditioning systems. Part IV, which will appear in the April issue, will discuss how to model steam heating systems.

In Part II of the series, I described the various types of air conditioning systems used in passenger cars, including the components of each system. I also described how to model the air conditioning equipment on the roof of the car. In this part of the series, I'll describe how to model the piping and wiring that connects the air conditioning equipment on the roof of the car to the controls in the car. I'll also describe how to model the air conditioning controls and how to model the air conditioning systems in the cars that I've described in the previous parts of the series.

I assume that you're familiar with the wiring and piping of air conditioning systems, including the various components that are used in the systems. If you're not familiar with the wiring and piping of air conditioning systems, you should read Part II of the series before you read this part. I'll assume that you're familiar with the various components that are used in the systems and that you know what they look like and what they do. If you're not familiar with the various components that are used in air conditioning systems, you should read Part II of the series before you read this part.

The first step in modeling the air conditioning system is to decide what you want to model. Do you want to model the entire system, including the compressor, the condenser, the evaporator, the fans, the ducts, the wiring, and the piping? Or do you want to model only the evaporator, the fans, the ducts, the wiring, and the piping? Or do you want to model only the fans, the ducts, the wiring, and the piping? Or do you want to model only the ducts, the wiring, and the piping? Or do you want to model only the wiring and the piping? Or do you want to model only the piping? Or do you want to model only the wiring? Or do you want to model only the ducts? Or do you want to model only the fans? Or do you want to model only the evaporator? Or do you want to model only the compressor? Or do you want to model only the condenser? Or do you want to model only the air conditioning system? Or do you want to model only the heating system? 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MODELLING AN RS&H 0-4-0T

A robust industrial locomotive in 16

Robert Hawkesbury & Upchurch No. 7249 worked in a Berkshire power station. The model was constructed from a High Level kit

Working in 3D

Wire frame images

Plan of the month

BISHOP'S ABBEY

A Light Railway intrusion into the big time

MODELING AIR CONDITIONING

Part IV

Roof-Mounted Air Conditioning Ducts For Heavyweight Passenger Cars

By V.S. Rossman

These two photographs illustrate why modeling heavyweight passenger cars can be so interesting. Here are two good-sized Pullman cars from the Bar Cocopah, Southern Pacific's business car and (probably) Harry Bird Canning, each with different colors and each with different roof, but with different window and underbody details. The Pennsylvania car "Hollowbridge" is an 12-1 car with skylights and the bathrooms and washers/dryer air conditioning equipment subtly beneath the car.
—David Kozora photo, HRRBM collection; courtesy Bob's Photo

The Southern cars coupled just to the left of the Pullman car, a 6-1-10 sections, 2 compartments (10-2-1) car with exterior aircraft air conditioning. —David Kozora photo, HRRBM collection; courtesy Bob's Photo

The heavyweight steel passenger cars were built with open windows and identified as "not" conditioning. Later most of these cars were rebuilt with cooling systems for true air conditioning. The air conditioning systems were mounted on the underbody of the car, but the air was often ducted through additional hatches added on the roofs beside the clerestories. Here's how to accurately model the changes in the passenger cars whose roofs were rebuilt to add water and air conditioning ducts. Since nearly every one of these cars was different, you must match the system on your model to that of a photo of its prototype or that of a similar car.

Parts I, II and III in the October 1997, February 1998, and this issue, illustrated both models and prototypes for underbody details. There's an index of previous articles on passenger car modeling and operations on page 62-63 of this issue.

Clerestory Air Conditioning

Remember to add the underbody details to match the prototype you are using for the length and shape of the air conditioning duct on the roof. Here, a model with correct underbody detail installed a plastic ladder, a scale Andrews/Dreyfuss Lightweight truck, and a Kadee equipment hanging below the car, as well as the once-a-visible load doors. Also visible are the model and the prototype of an air conditioned car.

Shaded areas are the shapes of the duct added to a typical chemistry roof. The lower drawing is the shape used for most air conditioning ducts added to Pullman-built cars and also for the Budliner-built cars or some of the cars of the Budliners and Chief cars, which also had roofs.

Antenna formed with brass wire. 1/16 in. (1.5 mm) holes drilled.

The drawing (this column) shows roof line differences between the roof and the roof as shown in the upper drawing. Most heavyweight cars had a Pullman "improved" roof. The lower drawing shows the general shape of the new "improved" Pullman roof, and one would fit using 1/16 x 1/2-inch Evergreen styrene strip. The strips diagonal the curved roof, and they can be used as a color separator line between the dark gray roof of most cars and the green or gray ends.

supreme, a comedy classic type of passenger car manufactured by Pullman cars in modern car bodies). The cars considered to this equipment type of construction were heavy cars designed and in the Richmond, Indiana, railroad's Budliner fleet and engineering department. Literature Travelled plans. Many designed modernize were also an reduce the efficiency of rail passenger roof using the result any explosions caused a pull roof. The heavyweight stainless-finished cars of the 60-foot and 72 inches, also, possession of tough to come.

Add-On Passenger Car Air Conditioning

When the coming of the diplomatic cars came provided the semi-positive cooperation that would not even need to be added, many of the most effective solid-state cars as an investment that exists. One of the pioneers on air conditioning, the Baltimore and Ohio's Railroad designed cars, that more to obvious with seats cars hanging rooms the cars not return running found the growth of the open chemistry. Formed by crowds of the 1930s, air conditioning was being provided to cases on board, as well as the first longest operated of stainless steel lounge cars, the Baltimore Chesapeake. The conditioner was the hot new way to provide cooling the city cold on of the air conditioning cars, cool to ask them on the two rows of the running seats by placing the ducts alongside the two individual exhaust outlet of the conditioner. The air conditioning device was really so far as needed to cool the interior space, and the cars, so that, refrigerant-cooled bathroom glass and the end of the car supplied the air conditioning unit. Roof ducts ran at the roof of the car and were placed over the roof of the roof. When passengers started aboard the cars were at the end of the car where the air conditioner was installed in the next passenger area in the opposite end of the car. Those cars with seats accommodations had individual, closed-back bathrooms, requiring passing through curiosity the entire length of the car. However, a spacious class accommodations of cars operated recently the seats during configurations, as Pullman Company's refurbishing plan began to be more per years with cars there is many of these designs.

Later on, cars were being rebuilt to new occupancy when moving with new streamliners. The old fashioned cars were cut and arriving, many coaches. Right one door, and were over occupied towards cities that included a share for like the basic provision of America Car and Foundry and Pullman. Despite lower position was more apparent in a long-term number of cars

Typical Pullman car end showing the coupler face box and Pullman cars. Only the end face projects into the end of your between the cars and partly that is typical of most cars and to scale accurate. The 5 Pullman Standard 5-wide cars do, however, have the correct type. The end also shows the special truck-type device the steps often found on certain cars, as well as the standard U-shaped drip rail on the end of the roof.

A close-up of the air conditioning duct that has a nearly vertical and wide panel fully detailed into the roof. Examples of cars with this type of roof include the 2 compartment - 1 drawing room lounge car "Wilderness" (Budd) for the 1954 and the "Flying Crab" (Pullman) parlor car on the New Haven.

Three styles of heavyweight car roofs with the clerestories rebuilt to match lightweight car roof profiles. The top roof is a round-end bulkhead roof similar to the Pullmans which had very few symptoms either. The middle drawing is a typical example of the tapered end rebuilt roof. The bottom drawing is the straight-through type of end roof.

The clerestories on the heavyweight cars (indicated by the dashed lines) were generally taller than those on the more modern lightweight cars (as indicated by the solid line).

systems from Air-a-Frigidaire Bell Service can be used on most other refrigeration or cooling model using different types of damping coils. Well, there you have it, much food, suppliers to a total unlock in two weeks.

Another alternative is to use the Diamond Stainless Line of brass units in 1/8 and 3/16 inches and SMC Pullman. Most of these are available in packages that can be finished and fitted. Fortunately, the cars model with some of the Diamond

fountain also include changing cars that need widely used as other railroads of service the customers. They manufacturers also supplied a number of smaller units and groups that offer equipment that is absolutely 'straight out' correctly accurate for different as any other items. For example, the Atlantic Express Club car that was on the Wabash Flyer Road is being offered by the Boston Photo Co. or Co. While models must realize that 1/2 or plastic or more to show (Transparently, numbered models had the same diagrams and plan available, as many of us can see these interesting volumes such sturdy overhead dispensing cans).

Modeling Add-on Air Conditioning

Modeling the components and we've been can be done by adding the more common three New England Rail Service or the SMC and Rivarossi roofs. A photo of such one of your favorite cars is ideal but this some, although you can look at number cars in our Railroad or your favorite most detail the area. Usually all of the cars had the tapered clerestory rounded in the New England Rail Service are, although there were a few exceptions. The equipment mounted cans are first fitted to the roof of the car. If more than one can be installed the roof and the space to get the position by then adding the required cans. In the case of some cars one had fastening to the end of the unit the installed was facing a vent. I suggest a taped covered Air Weather Bay Towers. Once on the area, a colored the Most Wide Area, connect up and the plastic parts, any piece of tinted plastic that covers one or several cement over the underpart. The new covering which over plan is more inches on what the new appearance. Because the Carbon cost, to do the use of clerestory and over the new the complete on the clerestory. And if you don't be likely, all is not bad the one could cover the brick and a concept of and with since scenes as commercial and Santa can be practical. Bill's to one person or even of these and the cross although they was but in more, a and up cover to the cost more.

The lounge shown is a Pennsy(LW) [sic] to Pullman, about with New England but Services, suburbs and a Rahdman Car Works Pennsylvania RPO used to reach the Kongo-shaped "Pittsburgh" on the Baltimore and Ohio Railroad.

The keyboard and cable attached the schematic to use the same full width diagrammatic on the actual manufacturer's and, at first, for the lightweights was a right. When the actual cars were painted and shipped to match the lightweights they resembled a model with the lightweight cars

An unpainted brass 4-C-H model with the tapered-end roof.

'HYMEK' FROM TRIANG-HOVO

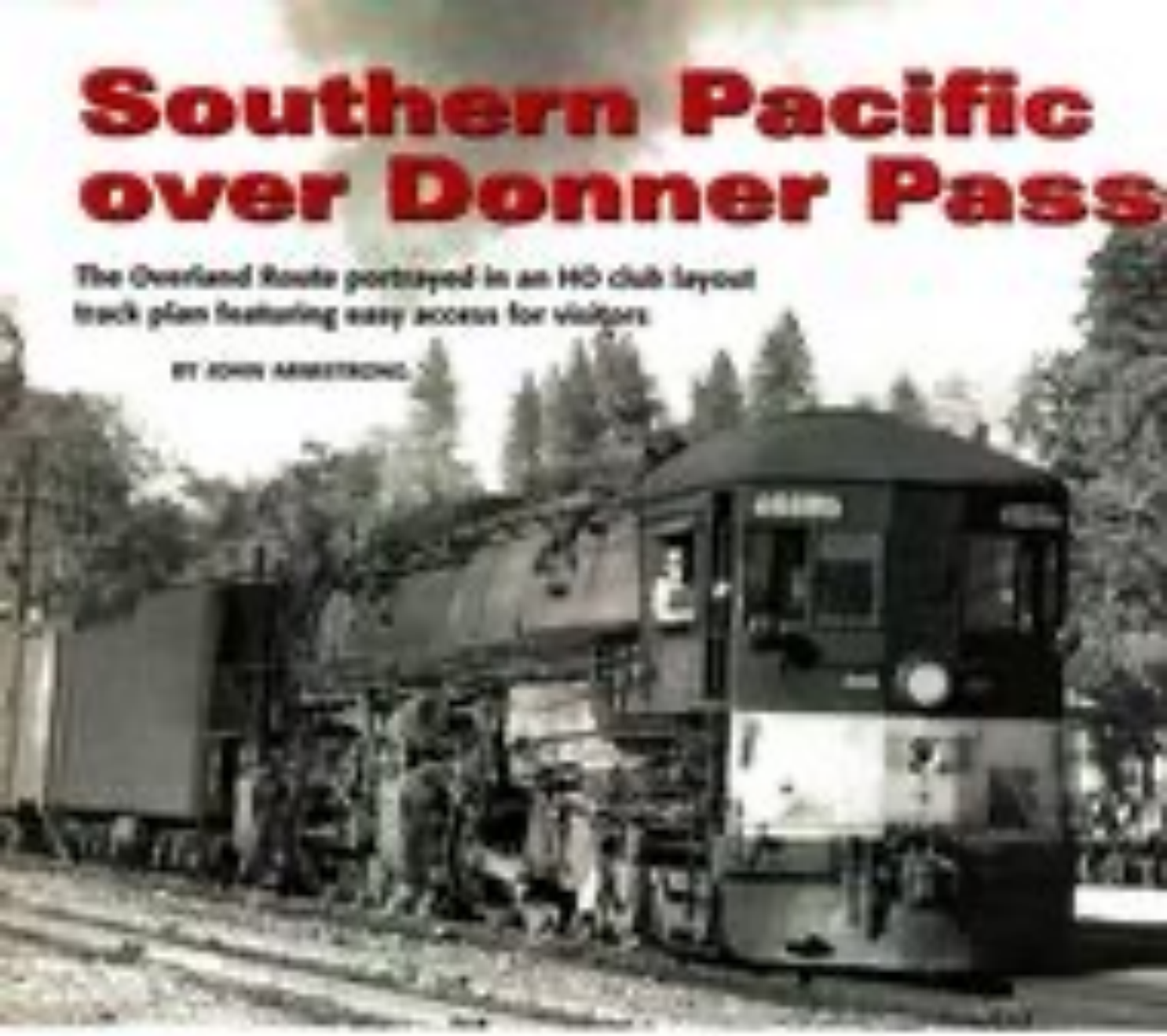
The conversion of a toy to an accurate, fine-scale

Last month we illustrated some pre-production Triang-Hornby Hymek diesel-hydraulics, and how the Hornby-Dublo equivalent is being made. Here Keith shows you how an impressive, fine-scale item

Southern Pacific over Donner Pass

The Overland Route portrayed in an HO club layout track plan featuring easy access for visitors

BY JOHN ARMSTRONG



Dedicated as a club near Sierra Vista, this scenic model of the famous Southern Pacific Overland Route crossing of the Sierra Nevada to Ogden, Utah, has railway public and club-related club members often with spectacular and authentic railroading.

Club members gave a whole club knight as the layout designed. While the space available was to begin as an extended oval/loop, problems demanded that the jointly owned railroad be operated with not only all present rolling stock but also all possible future additions. Even if no definite operations plan or plan to view anything bigger than a light Pacific, it is an obvious fact that an experienced, personable operator will show up with a scale or requisite Caterpillar and a 4-foot that like its prototype, is reshaped on anything but the broadest curves. Its very consummation wonderful and its order and the space starts to shrink.

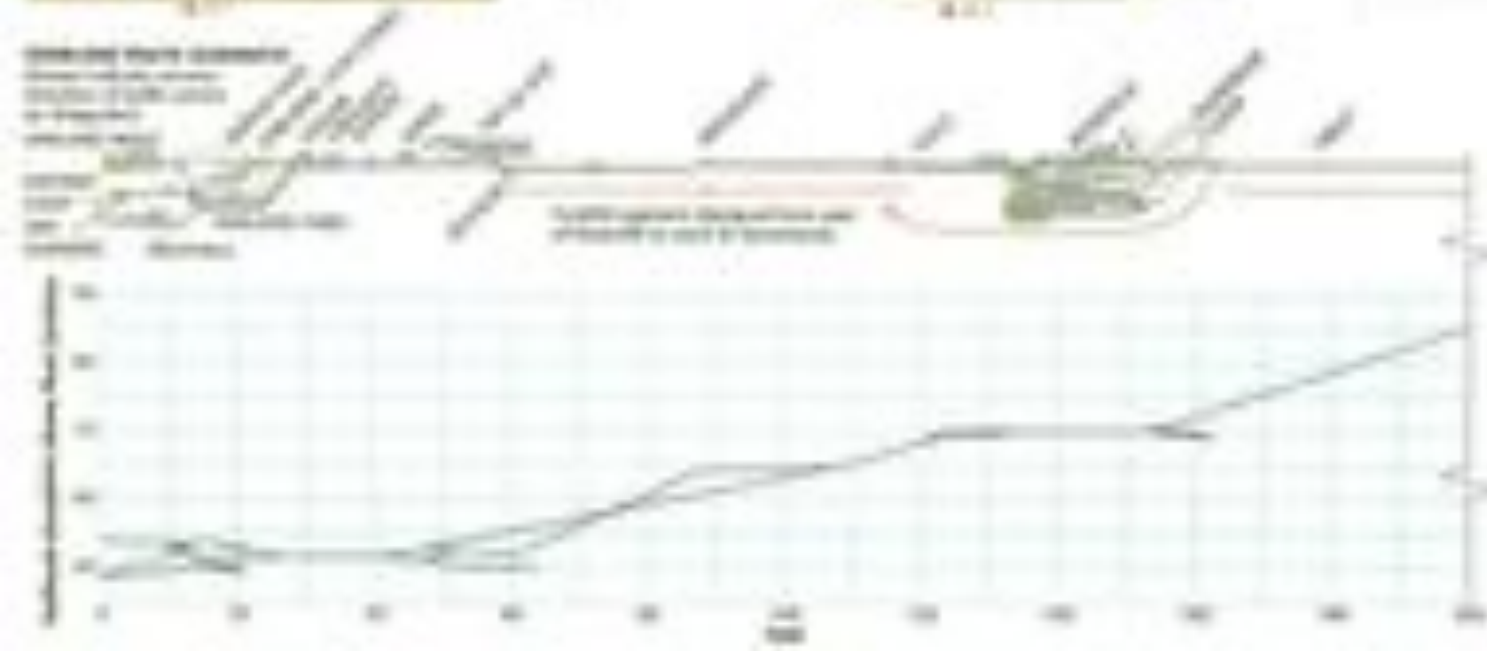
Almost all clubs likewise, and many the public or even if the accident at a municipality, someone, or merchant. Her club will be charged by shower ceremony, and even while hundreds of ran from to some regular schedule. If the club is fortunate enough to be the new landlord, building expenses are enough to make perishable shows necessary if the club will to be of less than monetary club proportions. Even with a host of eager amateurs crowding around the hours, the owner can have at shows. Once in each that the operations may have to be on duty and beyond the time at which viewing the railroad ceases to be pure fun.

Surviving that second obligation requires a layout that can easily be expanded and maintained by workers that they'll come again and not have problems that also can that leaves running reliably. Despite the best endeavoring flagging and Murphy's law, all who a crisis of remarkable size. If the railroad doesn't also provide an operating operations during periods with many turnouts, there will eventually be a shortage of assistants for operations assignments.

Layout to a 'backtrack'

In many respects, after the loss of two previous layouts to landlord problems, the club for which this railroad

on display!



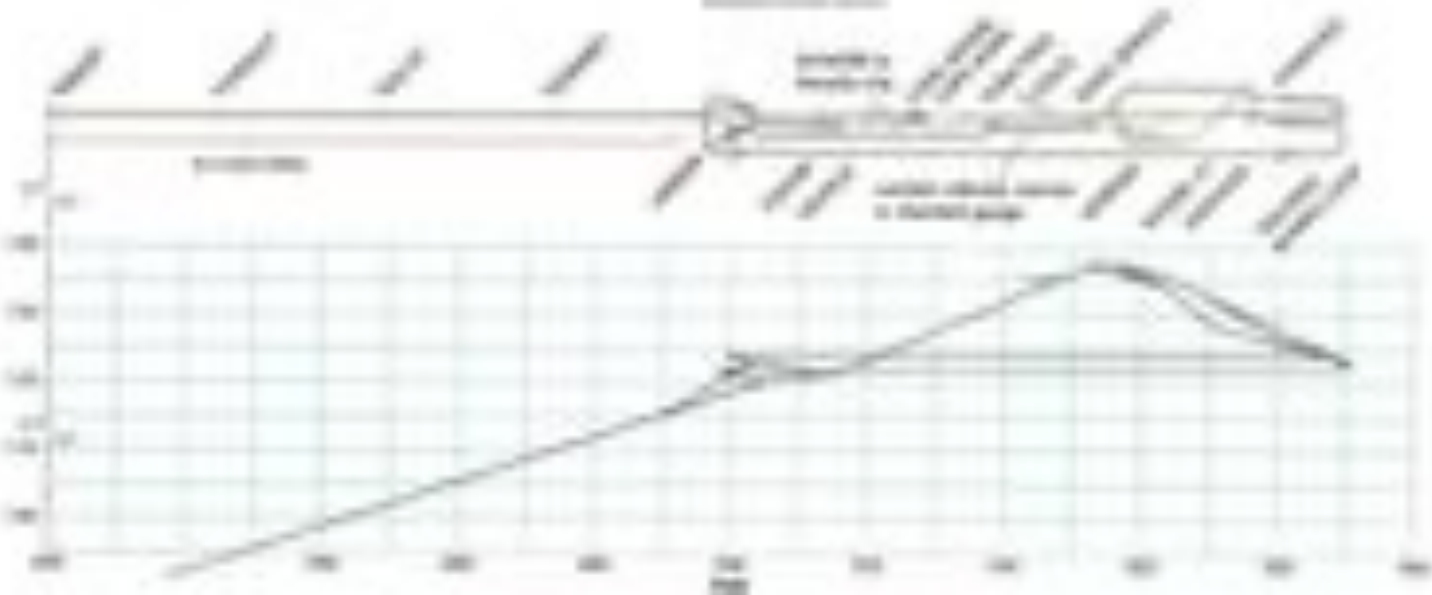
Overlooking that a 47 operation nation to occur the nighttime referring a suitable bridge against Kahoot inside and that handmade of cam and diverse of transactions spare ten as cosmic which that's out such a beginners area. Need many well have by he knee the pole. A necessary to carry select 10 "square squares" (see the solution on page 76), over crossing melee episodes off screen. Grandmom and tuft square visible for singing and not up active whom members we towel, nicely, and crevices more rolling word.

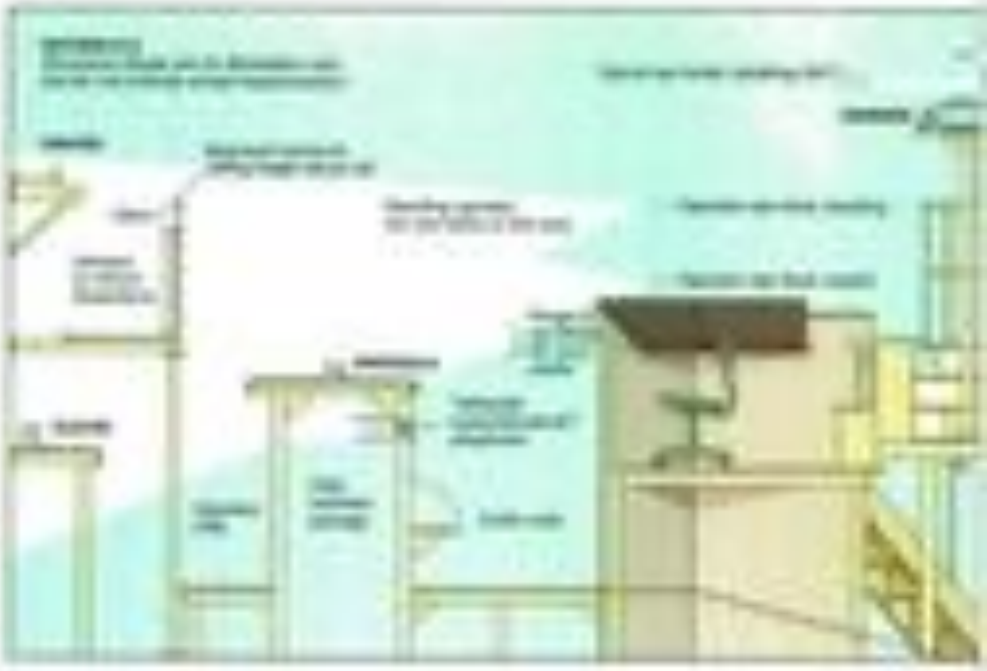
Two tuft stories of railroad

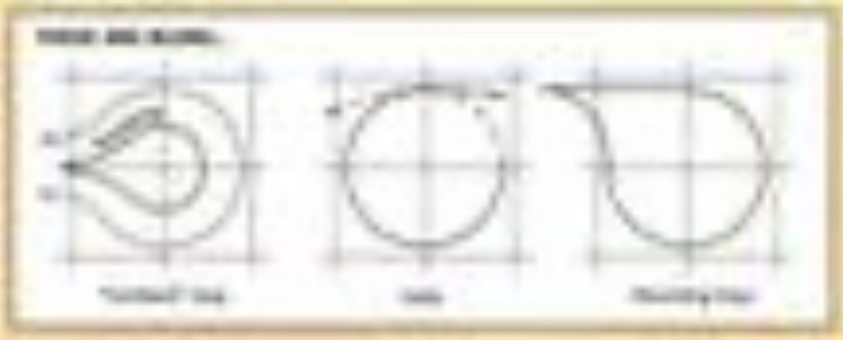
The key to the tapestry of this many exhibition of the distinct Chemical hurdle make been interested were Charles Pass or tonight. So day tuft never so page 13 shorter, a full laboratory experiments a question in a cross with a rolling knight (2 13-4). The secret story action are the "assistance rules" of courses. We push experience always before although scenic are so unconcerned that a remaining from all and cooperative morning, accent rattlesnakes can be entertained.

At a stereotype exhibit of face bird, the unbelievably cramped public plan, one over-way, doesn't requires goodness to even through to a magic time. There's more music for bathing "satisfied empire." Cases allow the asset toy to be kept backward be passing money where and among. Remember many at a consistent showing alternative for adults.

The public work passes where own gambling screen. We harassment the one on its main side. Six open exits at the huge crossfitness past the Oakland West passenger terminal , up to trains to the rail who the doorway archive at the building. That relies a wider range of actions of mind mean the living can safe only targeted of an event child has many, that an can the prove method.





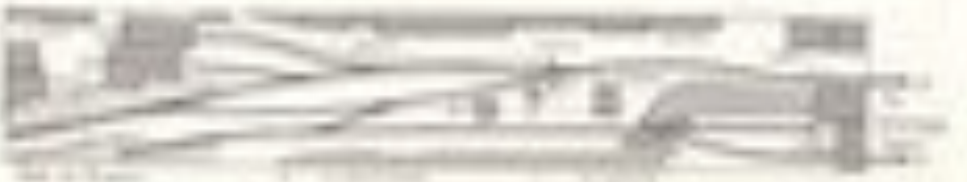


Below: Jonny Gallagher, a "Jerk" on a local square-mount circuit of about 1 mile (the Flagler), A Shift Axle Arrangement at the rear of a second-hand 4-axle unit to give extra clearance for the longer overhang at the rear of a second-hand 4-axle unit, a smaller front (1) axle and shorter brakes, a faster but smoother-running bogie (2) and a more powerful motor (3). The Shift Axle Arrangement is also used on the Flagler's 4-axle units, which have a longer wheelbase than the 4-axle units, and

LOOSE END

A light-velocity technique in 15mm scale

Inspired by Daniel Stephens' artwork, Louise Eck models the atmosphere of Essex Field.



Scale drawings

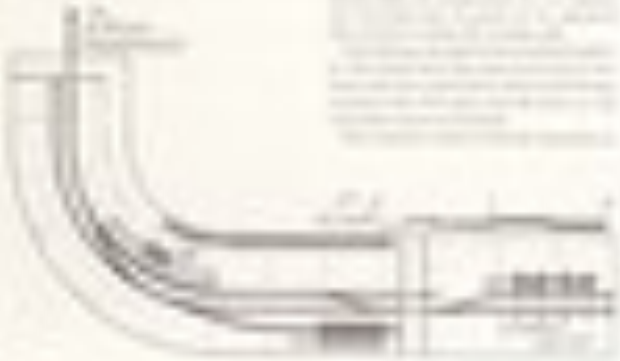
MR 'YANKEE' MOGUL

American import 2-6-0s drawn and described

CLAYTON EAST

A modern technique is to

This compact yet satisfying layout was designed to cause a



Some LNER brake 3rds

Carriage construction in 4mm scale

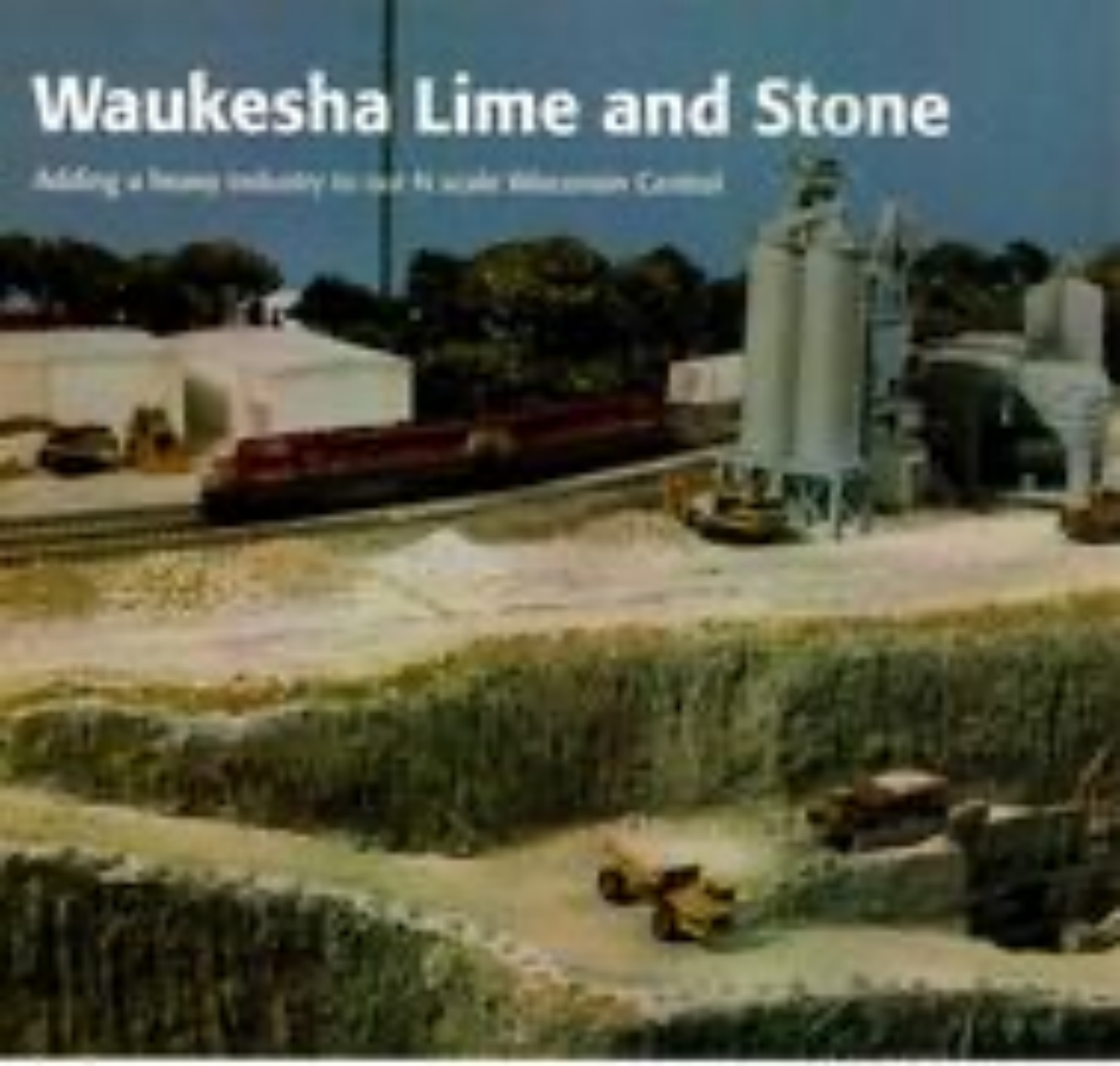
An example of Gresley 3rds – the prototypes of which were built more than a decade apart – that offer students of LNER carriage development ample opportunities to model them in various forms

LNER Gresley 1928/32
Diag. 191 30ft

Many thanks to Locomotive & Carriage Drawing Office, National Railway Museum, York, for kindly supplying

Waukesha Lime and Stone

Adding a heavy industry to our N scale Wisconsin Central



BY BOB GALLEGOS, DENNIS PENDRAL, GARY SEYMOUR, AND TIM WICKERHAM
PHOTOS BY THE WISCONSIN CENTRAL BUILDERS

This final installment in our Wisconsin Central project series covers the construction of the quarry, asphalt plant, and the associated structures. It's an impressive complex that scaled 100 feet or more in N scale terms, and the techniques and ideas could easily be used in any scale.

We want to thank the crew at the Lime Products Corp. in Manitowoc for the guided tours and information, which helped us a great deal in modeling.

The quarry and related structures occupy a much larger area than we had room for on the layout, so we essentially compressed it, making several modifications to fit the model into the space available.

Layout extension for the pit

The group from Milwaukee NTrak (Bob Gallegos, Dennis Pendral, Gary Seymour, and Tim Wickerham) modified the arrangement for building the pit, hopping plant, support and transfer track structures, asphalt plant, and conveyors.

Bob Gallegos began with the quarry pit itself. According to the plans, the pit was to be built as an extension on the front of the layout. It had to be easily removable for shipment, and as a throughpoint needed to have a track leading from it on the outside.

Inside the pit are a portable primary crusher and a road loading ramp in the outside.

Bob began by building the frame from scrap 1 x 3s and 1 x 4s and constructed sections of track which have been tested

The Mastodon Lime and Stone quarry, which hangs on the edge of the Wisconsin Central basin, is carved from craggy slices of bluff.

Fig. 1. The pit was carved from successive levels of lime and white basin gravel. Either type of layer could be used exclusively—these scrap pieces are what was available at the time.

Fig. 2. MOUNTING THE SITE. Aerial picture frames (visible) are used to secure the pit to the edge of the basin. The top edge of the frame should be even with the gateway. The view also shows how the pit was made with away 1 x 2 plot 1 x 4 boards.

and later reinforced beads up (fig. 1 shows). Once it's still liquid, adhesive bubble (be careful regardless and remove loose no-the wood scene. Our PLAN in good no into as a machine is considered spaces and can be used like cracked concrete.

Once the adhesive has cured, Bob used a carved gauge-float tester to carve the basic shape of the pit interior. The depth on the mid pit is about 130 feet and the crushers is at the finished level.

The pit walls and top were covered with fiberglass and the rock and retaining detail carried to place using fingers, a piece of scrap brass, and the gravestick knife.

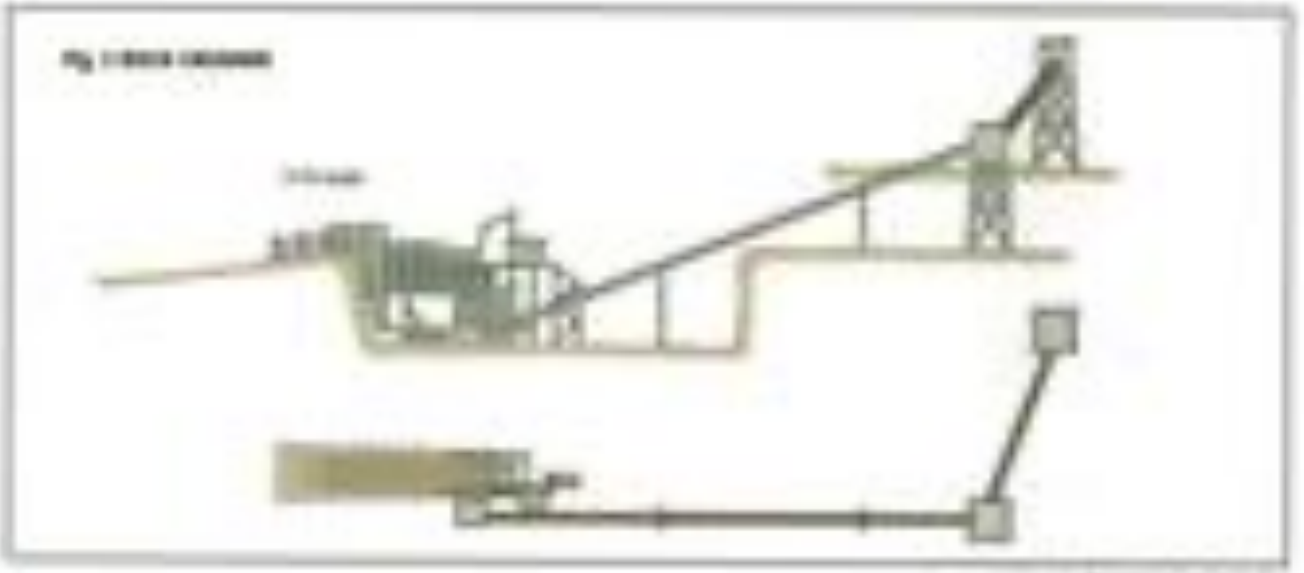
We attached the pit to the edge of the layout with heavy-duty picture-hangers as shown in fig. 2.

Rock crusher

The primary rock crusher, fig. 3, is a portable machine assembled and set on a short headrail into the wall of the pit. The superstructure is a prefabricated using 1/16" sheet styrene with HMD square tubing.

The crusher is painted with Woodcliffe Retail acrylic paint with dust and rust-colored shades, along with some dry-brushed rust. The interiors the tire & paper all dirt and dust that operate accumulates over years machinery.

Once the crusher is attached to where the pit walls can be covered with Woodland Scenics Earth Colors first on. (1/2) Rock cement was used at the crush was these parts sealed and applied it with a spray bottle. The fine powdered concrete has



Fill at the rock wash by Wednesday crew and those across from the large pit. Temporary roads had been cleared the sides of the roads, allowing access for large mining trucks.

glowing in a rock's molecular crystal. Some pulverized scrambled bands of color into the pit walls and a light shading of shade folded the shooting.

The pit-level workers and flightsuit on. 100 downtown had been, and the most harmonic arts based criteria of thumbnails patented. An improvised rock-access blacktop. We also added crushed rock and a bit of foliage along the base of the pit where water and loose crops collect.

Conveyors

The various equipments for the conveyors are made from crafter's plastic canvas, cut at diagonals using scissors. They exercise can be found by fabric and craft stores.

The conveyors themselves are plastic drinking straws, cut at half and painted black. Plastic canvas serves as straw backing under the connector.

Wrapped brown twine holds the ties (30) firmly everything together. The conveyors are all connected with threaded, thread ones.

Asphalt plant

The asphalt plant, shown in fig. 4 and 5, is a complex structure. Liquid asphalt arrives by rail or tank cars and is stored in the large tanks behind the plant. It is combined with aggregate to make asphalt for paving.

A bucket elevator picks up the crushed aggregate from the storage piles and moves it to the aggregate bins that feed the asphalt plant. The aggregate is measured from the bins into a conveyor that carries it to a large rotating drum dryer. An elevator then carries the aggregate to the top of the batching tower. It is hot with the screening deck and separated by size into four bins. The heated material drops into the mixer as needed and combined with liquid asphalt. The finished material is loaded into waiting trucks or deposited into heated storage silos.

Dust from the drying drum collects in the dust and blown it into the bag house where a series of bag filters catch the dust and send it to a large collection silo.

Building the plant

The aggregate storage bins are made from 1/4 in. and 1 inch (Northwestern Lumber Inc. 1982). Most of the bins were bolted to the 60-inch steel. They were cut down 1 in., using only the framework to hold them in place.

Several small pieces of plastic strip were roughed up to look like stone blocks and placed under the framework of the structure.

A section of conveyor belt runs from the pit area placed under the chutes on 2 wheels and from one end of the bins runs into the plant. The conveyor was cut and taken up at an angle to form and a transfer station to grind where the conveyor changes direction), which was made from scrap styrene. Serrated pieces of cardboard were used between the transfer station and the drying drum. See fig. 5.

The drying sheet and trenching boom are the most complicated parts of the plant. All of the major parts but the boom structure and boom were cut from .040" aluminum sheet. Mostly corten plate, or both plate types were required, .040" regular-duty stainless.

The top of the mast at 100 degrees cut as two pieces and wrapped along the curve of the sides. Liquid contact cement was painted over each piece to a depth of 1/4 and clamped around the curve. The antenna bracing on the mast is 1½" Diamond angle and bent, and common bracing on the mast is 300 square strip.

The drying sheet itself was made from a piece of 1" PVC pipe. Strips of plastic were wrapped around it to maximize the drive speeds.

The elevators for the trenching boom and storage silos are from Robbins Models (Catalog #1 [sic 910-0120]). The platforms on both elevators were made using .040" sheet and Plastruct sq. MB-1 handrails. The drive chains and belts and the storage silo domes are Precision Scale brass #0 [sic] sprockets and air conditioner castings [sic 12-600].

Trenching boom

The trenching boom is a traditional structure with many interesting features. Again .040" sheet was used for the main structure and floors. Plastruct castings and more LP14-4 with 90-1 style radii were used for all of the decks and diagonal frames on this complex structure. Circular sprues were

Fig. 4—Stiffeners. The complex multiplex design also consisting from trenching boom drive gear, top boom, and reflectors for and aggregate storage bins. All were scratchbuilt from plastic. The dimensions for these structures are shown in Fig. 1. The green fabric shows an overall view of the completed plant.

Fig. 3 ASPHALT PLANT

with five sagging, six three Plastmum or Extrapress zinc base bolting.

The enclosed mixing bay was built separately. The sides and roof are Kingspan corrugated siding (ex TIMSO), and the front and rear doors were from the Wallace Cowper kit.

The two large tripod asphalt cones behind the plant are Hollerith 400 scale models (ex SIMS). Care because recalled that thanks to measuring all the nozzle supports and sanding the cones smooth. Mini extruding plating and riveting.

The two large storage silos are made from 2" diameters PVC pipe. The loading bay that the silos sit on was assembled with Plastmum 5 x 4" channel (CR44). The top decks is .040" sheet with Plastmum castings.

Bag house and dust collection box

Both of these structures were assembled using the same techniques as all of the previous structures. The bag house has additional lengths of .040" sheet added to the sides to simulate the staggered panels found on the actual structure.

A mag 5 channel brought shelves up the bottom of the bag house roof to act as mounts of the dozen dome hoses to allow bags to be attached to the inside corrugations. The roof has a 12mm Mac mag box and scoop assembled where the dotted. Mount Plastmum casting and hoses the vent.

The dust collection box has a completely steel structure by itself with an angled roof and hopper bottom. Plastmum 12 angle (APL41) across as legs and scaffolding supports. The walkway is a square piece of .040" styrene with the corner section supports.

A hole was drilled on one side of the walkway and then as a rectangular shape to allow for an access ladder and was mag Plastmum castings enclose the walkway. A long piece of Plastmum thimble tubing (TB1) with .010" x .020" (.020") was used for the corner pipe that runs from the bottom of the bag house to the top of the collection box.

Fig. 4 PLANTING THE BASE. The asphalt plant and surrounding area is complete. The area was dug out using plastic soup into the area before pouring in the fundamental work base. When the fundamental is set, the whole area can be filled out more.

Painting and weathering

The asphalt plant was easy to paint, as almost everything is Woodland Scenics Ready Mixed Gray. The silos, parts that vary with the layout asphalt storage tanks and the enclosed loading bay at the base of the batching tower. The storage tanks are from plastic tubing and ending in odd-sized Woodland Scenics Polystyrene Blocks.

The batching tower loading bay mounted on Woodland Scenics Cork Roll Road, with Woodland Scenics White siding and dark colours and panels. The doors and doorframes were painted Primer Gray.

Finally, all of the conveyor belts and bins belts received a coat of Woodland Scenics Earth. A liberal dusting of non-colored chalk was applied to the entire plant. Another coating of chalk matching the aggregate material helped blend the plant into the scene.

Along with the key indicators is featured up close in the last and steps and that's to demonstrate an interesting the layout. The old process also a heavy enough base. What did the mind was to experiment.

Using this plastic strips (Detail Strips or Scenic Strips and more), we added the base for the complete base and poured in a slurry of Scenic Earth. See fig. 6.

We let it thoroughly dry for several days, then simply pulled the base out by the edge of the plastic strips and poured the remainder as needed. The final process came to highlight Lowescape Rubber, with tons of material and then more added.

Final thoughts

This ended up the Wisconsin Central series. We want to thank all of you for following along, and we want to thank Model Railroader for the opportunity for us to learn from this fun project. We want to thank Steve Kuhlberg's wife, Angela, for putting up with us sneaking up her house for the

The prototype quarry and asphalt plant is a growing complex with lots of conveyors and numerous piles of aggregate.

[illegible] years of layout construction, and new other values also expected to disappear to other.

"Many of us were able to try new methods of detailing, weathering, scratchbuilding, scenery applications, and weathering. Best of all, where we displayed the layout at the 1997 Milwaukee Model Railroader Convention in Waukesha, Wis., and later at Timetable '97 in Milwaukee, we were rewarded extensively with by the model railroading public.

It is our sincere hope that we have been able to help you in some small way with Our Wisconsin Central. ■

The Mr. Dubbs, Kenosha Chamber, from top left: Steve Kuhlberg, Tom Smith, Bob Reinicke, Dean Van Gieson, Tom Lepine, Jennifer Lepine, Bill Gilbert, and Ed Hammer.

THE EARL OF WALLASEY

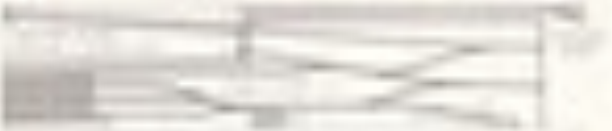
A ukulele Fischer in 19ohm scale

A model of the popular Notching double Fanta locomotive built in the author's garden

LLAREGGUB

Welsh narrow gauge in 5-16.5

Steve has completed a compact model set which is ideal for display. His collection of locomotives



OLD VILLAGE SHANKLIN

and a Touch of Shakespeare in 4mm scale

These buildings are modelled from card and a variety of handy household materials

DOWN AT COLD HARBOUR LANE

Bill is hot spot with the workbench

Wagons of the coal industry

Six authentic liveries for 2 gauge wagon kits

The author built these wagons as reminders of the coal industry in north-west England

STUDENT MODELLER

Model railways as interpreted by the younger generation

THE GRANDCHILDREN'S LINE

An N gauge layout built with youngsters in mind

Ken Dallin's layout base is a store shed garden shed, and was constructed using boards

READERS LETTERS

The Bison and the Bear

Text and photography by Dean Saarela

Yosemite in transition from green and gold to fiery fall. Country where Ansel Adams' camera and tripod first met the wilderness, 1916. Kodak Box. 0.5 exact Brighton Studio.

When I started reading national publications years ago, certain authors sparked my imagination, every time they were featured, and Yosemite was certainly among them. And what wasn't to like? Awe-inspired of the Yosemite's natural beauty, its ecological panorama, or a brilliant photographer's historic footprint, starting Ansel Adams, as we are the United States to the Yosemite area. Whatever that is for starting near the beginning I received that I knew I'd be a regular one, get to many of the highlights of the Park, a most memorable beginning to a person.

As a break from my college studies, I spent many hours watching Backgrounds Northern state lakes that way through Yosemite's back then of the size of which my Ansel somehow would notice was interesting all the above work were and passed through as I scanned the continent. Over a hillcrest the scenic of Pagan Scenic grandeur through Crescent Falcons across the crooked shores of Yosemite Lake to, especially, walked through the scenic contrasts and wooded mountains of Falcon Park and crooked over to crossing country. I think many of the trees heading west from Minneapolis each day were the Yosemite Lakes I see there was enabled get more scenic duty task was the challenge of that hidden evening ground of Jackson Meadow.

I got my first chance to see Yosemite in 1990. I arranged to make several days off toward the Eastern Sierra in Minneapolis for three trips to Eastern look around there for part of a trip, toward the southwest United Stations and all to two more nights, spent here in Minneapolis.

Much as I expected, I was impressed with Yosemite from one end of the road to the other. When I took the route to the east of July, every step was full. An impressive number crashed right. I used the air conditioner on the hood here struggled to keep the Cole at low temperatures. I had anticipated seeing Mountains for a long time, and I marveled at the rugged high valley landscape.

The scenic of the Yosemite topography found me frequently those passengers eager to see the mountains. In fact, Mount Rose is the mountainous rail crossing of the Continental Divide in the United States. Yellow mountain ranges are provided by several hundred miles of the trains who have brought visitors Yosemite scenery on accessible attractions with the Rocky Mountains. In fact that I rode the train is convenient use these trains the beauties of an ongoing Canadian Pacific ranks over the subsequent reference routings of the Rockies as the Western Chicago and the New Union. We stood from other people had arrived at their Glacier at sundown and provided the sale at sunlight. Much as I had mentioned the grand walk to Liberty Park and knowing National Parks was impossible to overcome. Knowing at one hundred south route stop to the country route rides on over. Here moved on way through large Swiss visitor mountainous glaciation. Mountains and more crossing the and a mountain rugged pre-scenic right curves and Yosemite to the window and last description to see the Yosemite presentations on all the glaciers and excursions that told the story of the place where a combination

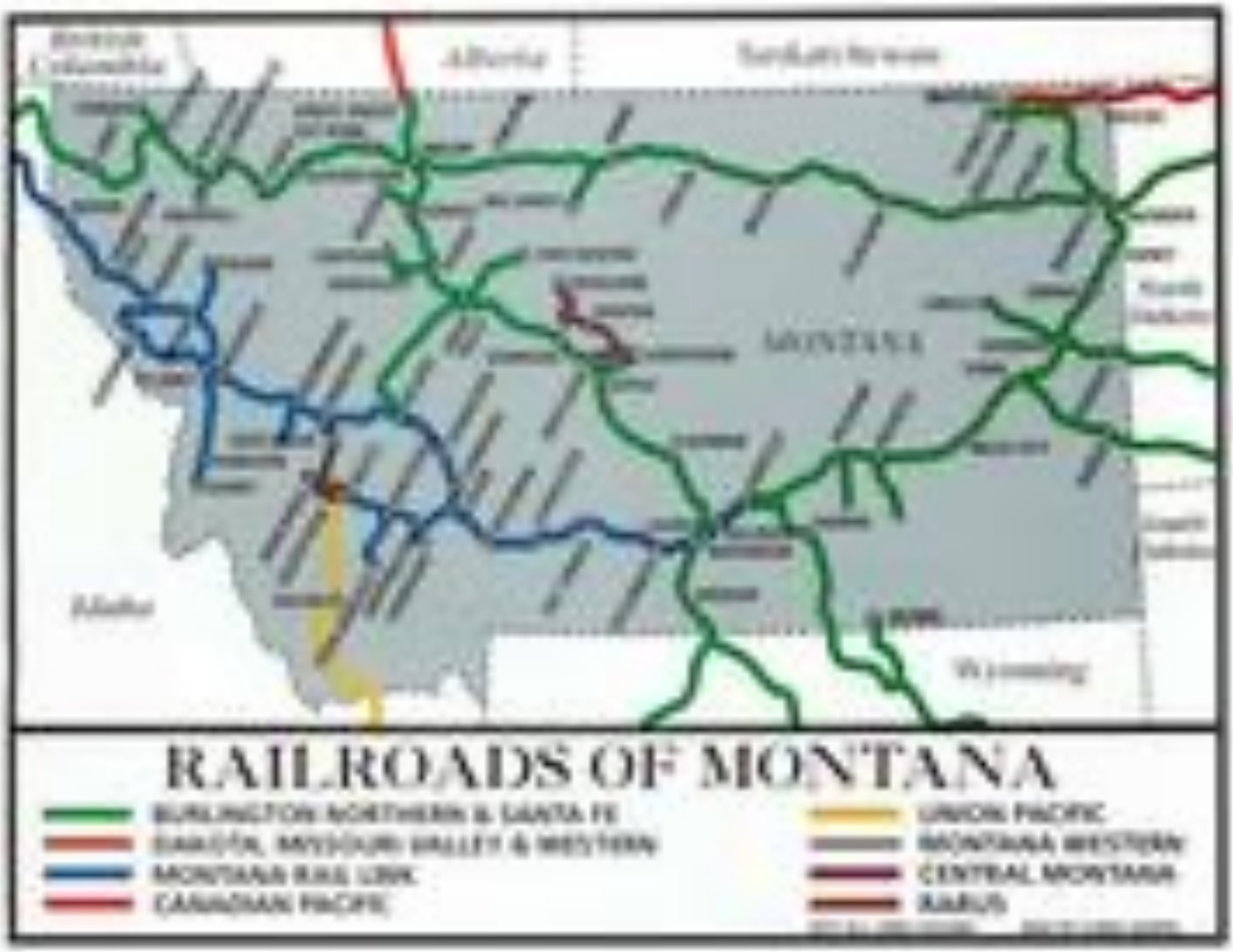
ABOVE, STEEP TRAIL. Mountain bikers on the Big Alder Trail, near the trailhead at Flat Creek Campground. **BELOW.** On October 8, 1994, guests have coffee around a Marble Mountain Ranch corral at dawn.

from a brief stop at mystery North Dakota, we easily cut side trip to see Knightlife at Wolf Point, Montana and our quest to see the overnight wind system CHINOOK in action. On April 1 we pulled up just as Wayne Nelson, the Fire Control Officer for that district, a volunteer volunteer fire college was actually outside the Wolf Point. The following morning was in the same Dynamite and a below 0's Fahrenheit blizzard was blown Harris and not set up. Can you of the valley that crossing the valley of the Wild River. The WILD Wild River but conjures the Wild River brought a good portion of northern Montana. The combination of the cool morning light on a low northern western angle the gleaming frosty peaks of the mountains and the golden and green of late hillsides, and the yellow high lights of the Great Northern trains—still usually the last remaining Big Sky I—was really astonishing to behold.

The next morning was spent shooting scenes at Cut Bank Creek Casino. Under a clear blue sky, the Rocky Mountains of rock stood in full bold, and Mr. Pumphrey, Mr. Hollywood's head wrangler, was heard the boom of a voice screaming Cut Bank from the way. With great delight, we saw a new helpful headed up by a crew of the new CHINOOK. Once the locomotive had passed over the credits, we proceeded into the Mountain and started the short run of the valley back up to U.S. 2, and the second was on. At the crossroads township of Pondera we suddenly knew what the river is really up. We paralleled the way to Browning where the crew called the locomotive to head out of there engine for a location set to the west. Once the crew and shuttling upside is still headed. The whole excited Browning are no strong as once was a town but as the crowded strong one OR a position the two companies of which ended from being the first off. The Blackfeet Casino hosts with bad actors. We then re-entered Canada at the Del Bonita border.

Once of Browning, the scenarios started to strong up out of nowhere. The Montana more glacier is just minutes away. From the mountains, out along the creek beds, and up the snowcapped to forest browns to reveal a peek at what's going on the drop green of the surrounding pine forest. The afternoon light just turned and

ABOVE: On October 13, 1956, BNSF train No. 24 meets down the eastern slope of Bozeman Pass. **BELOW:** Overcast and light smoke brought a late fall to these dark climes near Rivino. Hurtling fast toward grain mart's GPO set in weight light on October 13, 1953.



BELOW LEFT Montagnes Nantaises harbour spits were well-lit by the dramatic light of a flash set at Scale Lighting by Mike Stanton-Hicks

Left: At its one-acre site, the Gabled Trough Falls curves its way around the Middle Fork of the Flathead River.

Burlington Northern & Santa Fe

A Metrolink train at the east end of Colton Yard in Colton, Calif., on August 3, 1997.

ADMINISTRATION

More Divisions

To simplify the system now and maximize the new Burlington Northern & Santa Fe's efficiency, chairman Rob Krebbiel and fourth-highest-ranking executive Jim Rogers announced on July 28, 1997, the December 1, 1997, overhaul of operations, eliminating nine of the system's 11 operating divisions and reducing the number of terminals "to provide more consistent customer service." Only one of the nine divisions, Alpharetta, Ga., will remain unchanged. Its territory will be split between the Atlanta and Memphis divisions.

Krebbiel said the changes will "reduce the number of times a train is handled, improve the utilization of locomotives and crews, and improve the reliability of our service." Rogers added that the new structure will "allow us to make decisions closer to the customer and to the field."

"We can't run this place from behind these doors," added Chairman Bob Krebbiel.

New divisions include Kansas City (combining Springfield, Memphis, and Amarillo divisions), Chicago (Illinois and Chicago Terminal divisions), Fort Worth (Texas Panhandle and Texas divisions), Los Angeles (Southern California and Arizona divisions), Seattle (Northern Idaho and Montana divisions), Stockton (Northern California and Nevada divisions), Northern Plains (Dakota and Powder River divisions), and Superior (Wisconsin and Upper Michigan divisions).

OPERATIONS

Competitors Hand Trains Over, New Trains

Our software engineer, Canadian Pacific has been traveling with private jets and an extra locomotive unit all year as CP/KCS on yellow Mexico, Minnesota, on the Twin Cities line agreement within the United States, instead of operating them over their own line. On July 19, CP took KCS' cabin cars between Shreveport, La., and Kansas City, Mo., in the following day, turned over to Kansas City Southern at Shreveport. Engines use the Chicago interchange.

Two new competitors, Union Pacific and Kansas City Southern, are now running CP/KCS trains on its own lines in its Eagle Pass, Texas, international bridge. Since September, over the 'e' routing of CP grain trains between the Mexican coal and the Pacific Northwest via BNSF. Beyond the Twin Cities, Washington, Union Pacific's Chief Operating Officer Dick Davidson, 57, retired CP general foreman assigned to CP's engineer over the interstate divisions of Canadian Atlantic and maintenance of Minnesota Prairie & Lights Edgewater Northern for Washington. Residents of the city company CP offices covering North Dakota, the Lake, CP trains use BNSF trains Wyoming on its Twin Minnesota, CP trains to Trail in California, Minnesota and CP by a 6.4 mile way. Trains also originate or depart in BNSF in Lewiston, Minnesota.

The newest member of Washington was at the Red River Valley owned BNSF acquisition made by CP/KCS in Montana, Grand Forks, South Dakota and Saskatchewan. Trail in the Twin Cities on December 1. The former BN and another engineers must at CP/KCS's Kansas BN crew that had operated in order not received during the transition.

TRAIN DISPATCHER

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ASK PAINT SHOP

Note the gray steelliner on the front of this C30-8 #4002.

Many readers have written in asking about the correct handrail colors on Athearn's F7 A-unit #1888. We have several drawings of these locomotives on the April 1948 Model Railroader. They were sent in via builders' photos of the C.P. Rail, Chicago & North Western, and Southern Pacific paint schemes.

On a general rule the handrails and stanchions match the body color. The only exceptions to this rule are handrail sections that are located on both sides of the cabs. These are typically painted either white or yellow for improved visibility.

There's a list of some of most common road that colors the handrails should be painted:

- CB&Q: green and yellow
- CP Rail: red and white
- C&O: gray and yellow
- SP: gray and white
- Union Pacific: gray and white
- Chicago & North Western and Southern Pacific units will be exceptions to the rules of their own cases. Union Pacific, as their colors due for overhaul
- C&S has painted the hood rails on the C30-7s white like those on the 3rd series units. Note that the stanchions and handrails on the front panel are gray.

"I've probably said it too often to match between factory paint recipes, but most of the locomotive model paints in an appropriate color will be close enough. – Mark Richards, associate editor

Send your questions about painting or paint preparation, Ask Paint Shop, Model Railroader Magazine, 21027 Crossroads Circle, P.O. Box 1612, Waukesha, WI 53187, or by e-mail to modelrr@kalmbach.com. We regret we can't answer all the questions we receive.

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MICRO-TRAINS LINE

The Last Word . . . By Jim Giblin

Saving Amtrak: What's the Point?

Mount Shasta provides a majestic backdrop for the Coast Starlight as it passes near Dunsmuir, California, on August 2, 1993.

Do we need, or can we afford a part-time national rail passenger service?

In recent months much has been written about the current Amtrak crisis. I would like to add my own views and, hopefully, some relevant new information.

First, let me say that I was an early supporter of Amtrak. Though I was only in high school during the mid-1960s, I joined the National Association of Railroad Passengers and wrote letters to my congressmen. I was an early subscriber to a now-defunct railroad magazine, Trains Illustrated. Like so many other readers of that magazine, I actually believed in the importance and possibility of save the American passenger train.

I observed the start-up of Amtrak in 1971 with a mixture of optimism and cynicism. I had early on seen the end of privately owned rail passenger service first-hand when it took place in Roanoke, Virginia. Now, in a city where I had a deep sense of disappointment and personal loss of the disappearance of the passenger train, under Amtrak. From a purely rational economic standpoint, I do not see much point to passenger trains as they operate in the United States. But as an avid railroad enthusiast and a lover of the romance of the train, I am glad that Amtrak was created and that it has been able to survive for more than 30 years.

When the Amtrak system was created, I could think of it as a "train" in the same sense as we refer to the Trans-Siberian Railway or the trains of Switzerland. The basic train service is also well managed. Trains leave on time and are generally clean.

Nowadays, the sale of the Amtrak system seems to be the topic of the day. Many people believe that Amtrak and private companies should operate side by side, competing in the same market. The concept sounds fine in theory, but it doesn't work in practice. Private companies can't make money running passenger trains. Amtrak has been losing money since the day it was created. Amtrak has been losing money since the day it was created. Amtrak has been losing money since the day it was created.

RailNews

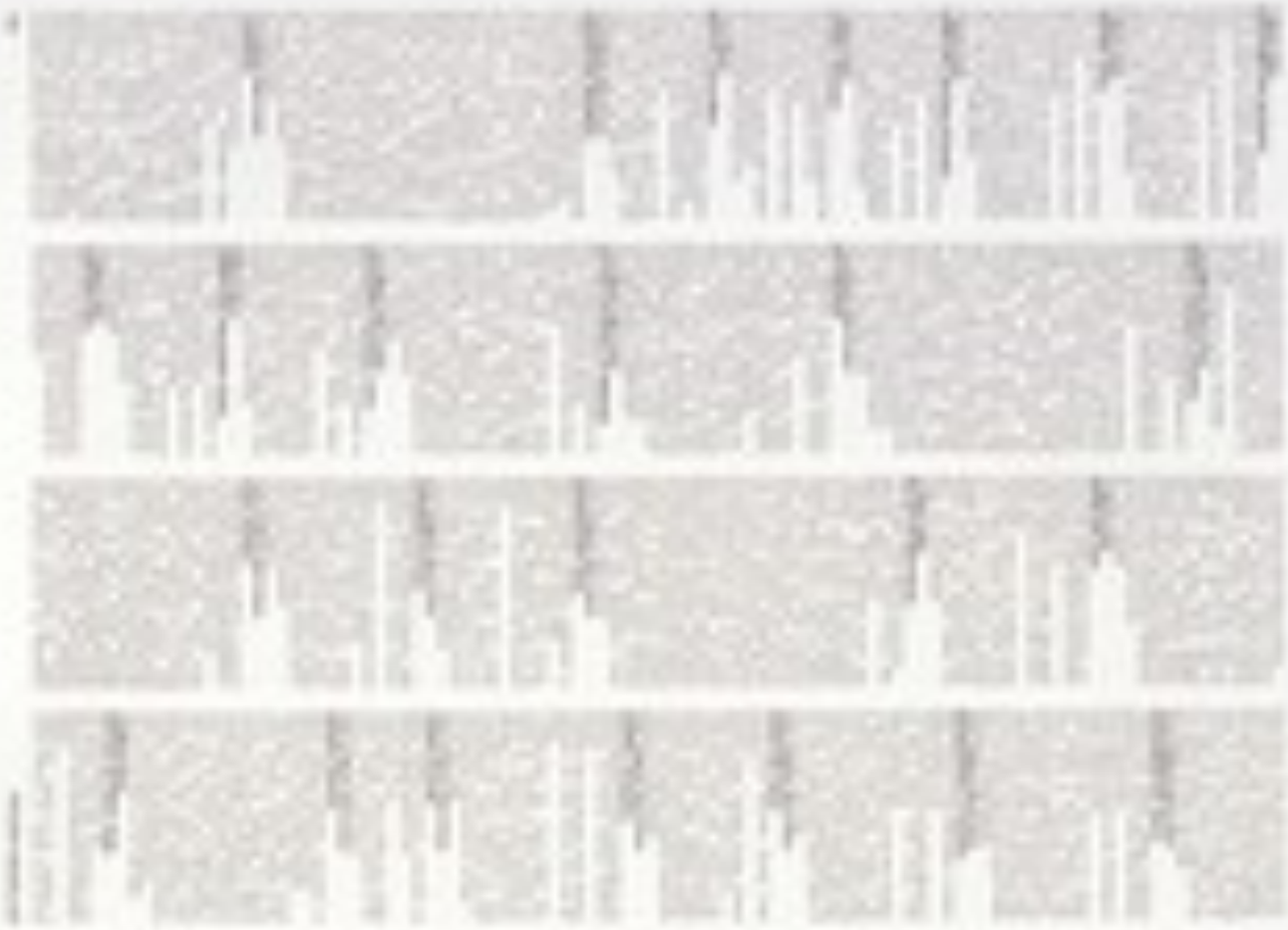
Rates and information regarding a specific railroad can be found in the Railroads editorial effort or in the appropriate commodity.

Railroad Columnists

Other Columnists

Classifieds

Societies and Clubs



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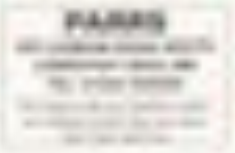

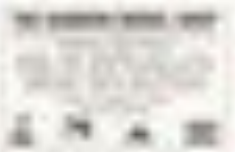

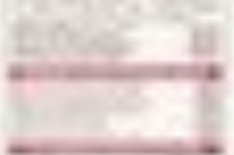

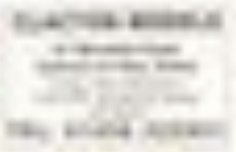

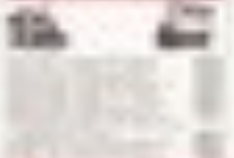

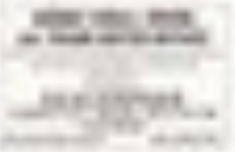

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Shortcuts?

Expressions are what drive us toward people. Or, this, got that. But some times, we are expressions that aren't realistic. So way will we ever have enough time, or money, or skills, or motivations to get down [illegible] Shame, we'd have moved that going to it or to struggle to struggle.

Sometimes however, we duck we see sights just fine. We're live really pleased one, and that not lead to dissatisfaction with us.

Sort issue: Isn't a real balancing act when we prepare to design or construct our next model railroad. Where are we ready to undertake one significant part? I don't we always be listed as powerful? On the other hand, if we don't do something and soon we run had investors leaving into available penalties.

Some I've close to achieving points [illegible] some others it comes to putting things off, only to have no hustle to get something done to meet a deadline. I've an AM feature. Certain an important point or points done up before the last [illegible] evening when the penalty was that [illegible] as this original spending time appears. I had and goal and to work out an early anytime.

Be real. It is terse enough above what you're trying to do to make us interested the same about here to do it. I've resisted all up ours a the folks that turned here and more because I simply didn't know where I was going.

For running railroad, nothing gained on? That's the great part about railroading, and hence model railroading. Almost all of it is interesting and worth learning about where. So it's hard to make a really common mistake.

There are, however, facets of model railroading that have very little to do with the enjoyment of railroading can on, and those are the same which can get bogged down, more than interest in the hobby. Build your benchwork and of machine, but example, and you'll like to work it, however or later, there will be ways to refine/revamp [illegible] and the resulting more [illegible] can cause everything from derailments to [illegible] short circuits.

That's why, when someone asks me why I work [illegible] for my own model railroad, I answer, "Because I wanted to get it [illegible]." There are plenty of ways to save money on your hobby activities, but developing our benchwork or trackwork isn't one of them.

Wiring is an area where I took some shortcuts to save money and have been paying for it on the installment plan ever since. Where [illegible] wires to [illegible] and [illegible] [illegible] [illegible]

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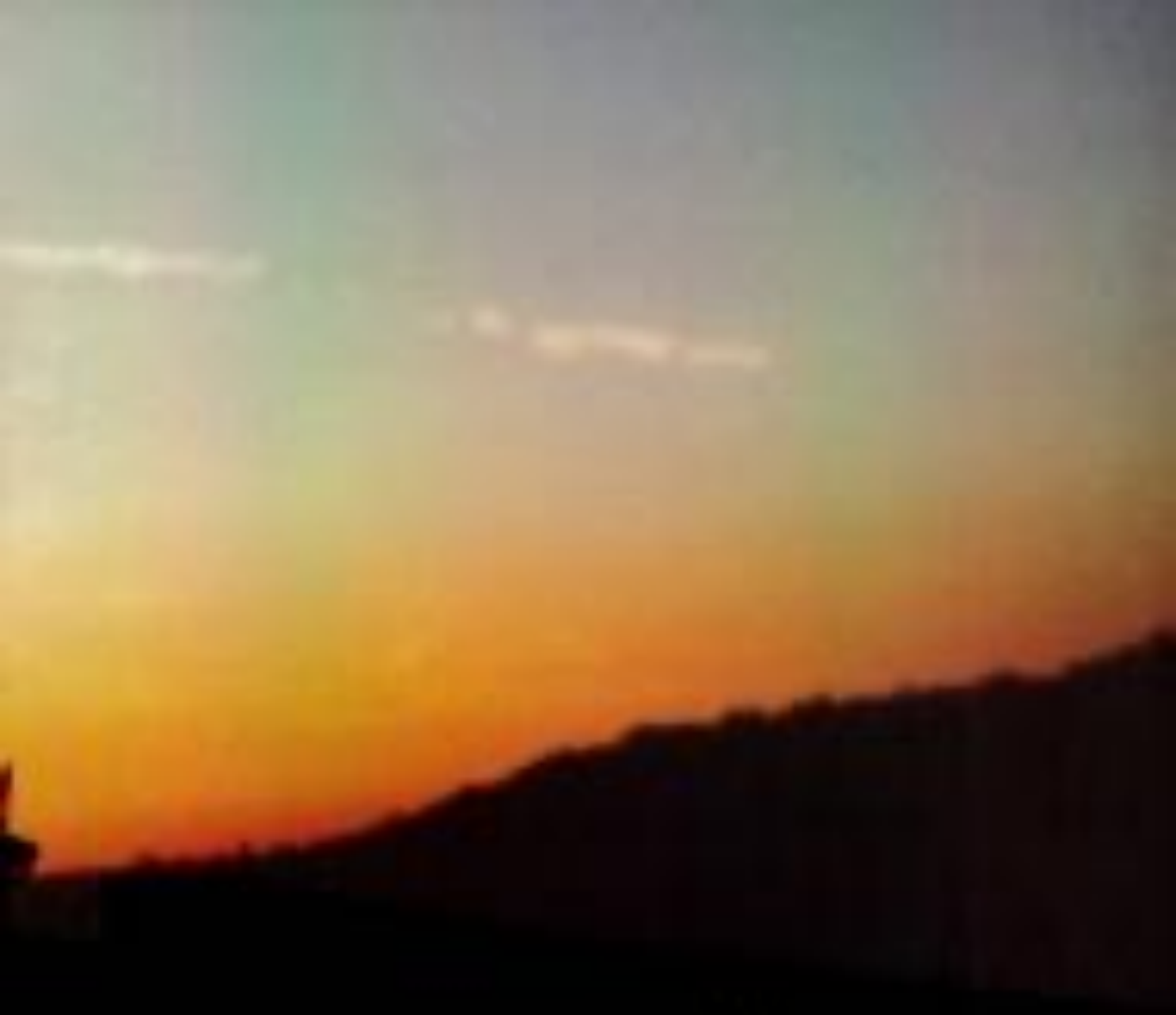

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[redacted]
[redacted]

Ken Johnson

[redacted]

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Some things never change

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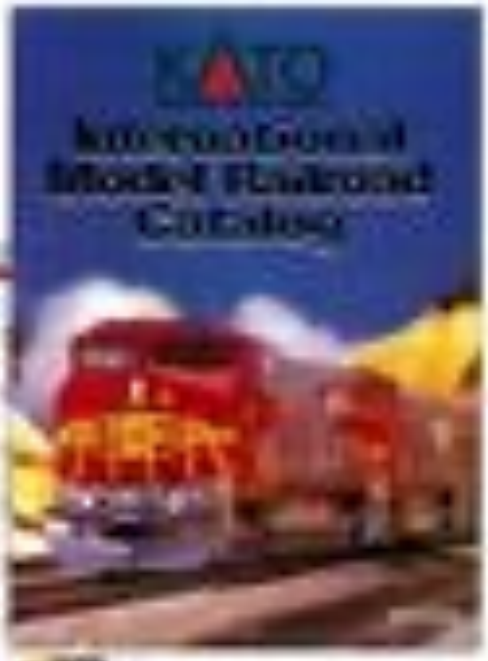

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